

Outcomes: The Benefits of Prevention & Treatment

**TREATMENT
OUTCOMES
FOR:**

Adolescents

Pregnant Women

ADATSA Patients

Supplemental
Security Income
Recipients

Mentally Ill
Chemically
Abusing Patients

Low-Income
Patients

Patients Receiving
Opiate Substitution
Treatment

Patient
Satisfaction

The Work of the DASA Research and Evaluation Section



The Division of Alcohol and Substance Abuse's (DASA's) Research and Evaluation Section was created to respond to the need to demonstrate the effectiveness of substance abuse prevention and treatment in serving the overall mission of the Department of Social and Health Services (DSHS), "to improve the quality of life for individuals and families in need." Through research and evaluation activities, DASA is able to document the role of alcohol- and drug-related services in enhancing client self-sufficiency; protecting vulnerable adults, children, and families; and assuring public safety and helping to build strong, healthy communities. Research also aids in the development of "best practices" that can be utilized by chemical dependency treatment providers in improving the quality of care, and provides the scientific basis for the development of sound public policy.

DASA's productivity in research and evaluation is due, at least in part, to the strong partnership it has developed with the research community over the last decade. This is most evident in the 90-member Research Subcommittee of the Citizens Advisory Council on Alcoholism and Drug Addiction. Members are drawn from research institutions throughout the Northwest. DASA also coordinates a statewide "Bridging the Gaps" workgroup, which seeks to forge new partnerships among researchers, prevention and treatment providers, and policymakers.

Current Research Efforts

Some of the results of the outcomes research conducted under the auspices of DASA on the benefits of prevention and treatment are displayed on the following pages. Below is a partial list of research projects currently underway:

- Arrestee Drug Abuse Monitoring Project
- Evaluation of the Washington State Drug-Free Workplace Program
- Statewide Household Survey to Assess Need for Treatment Among Adults in Washington State
- Treatment Outcomes of Persons with Co-Occurring Mental Health and Substance Abuse Disorders
- Outcomes of Pregnant, Postpartum, and Parenting Women Who Receive Specialized Chemical Dependency Services
- Treatment Outcomes of Parenting Women Who Participate in Specialized and Non-Specialized Long-Term Care
- Analysis of Use, Cost, and Outcomes of Opiate Substitution Treatment Services in Washington and Oregon
- School Outcomes of Youth in Publicly Funded Treatment
- Cost Offsets of Treatment for Supplemental Security Income (SSI) Recipients
- Evaluation of the RUaD (Reduce Underage Drinking) Program

In addition, the Research and Evaluation Section is assisting in development of a web-based client outcome tracking system for use by providers, county coordinators, and state-level managers.

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Profile of Adolescents Served in Publicly Funded Chemical Dependency Programs in Washington State

A profile of adolescents (ages 12 through 17) admitted to publicly funded chemical dependency treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	5,657
<i>Median Age:</i>	16
<i>Gender:</i>	64% male; 36% female
<i>School Attendance:</i>	70% in school (at least part-time); 30% out of school
<i>Primary Drug:</i>	Marijuana - 65%; Alcohol -21%; Stimulants (including Methamphetamine) - 9%
<i>Criminal Justice Involvement:</i>	67% arrested at least once in previous year
<i>Housing Status:</i>	2% homeless*

A 1999 study of adolescents (age 20 and younger) admitted to publicly funded chemical dependency treatment revealed the following profile:

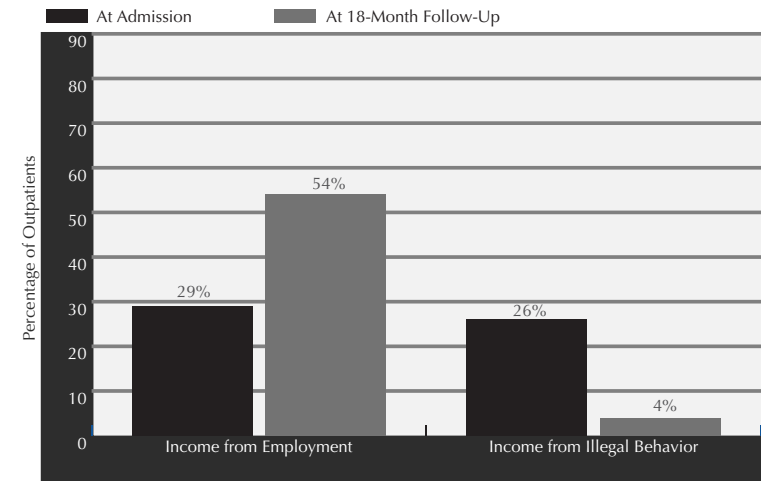
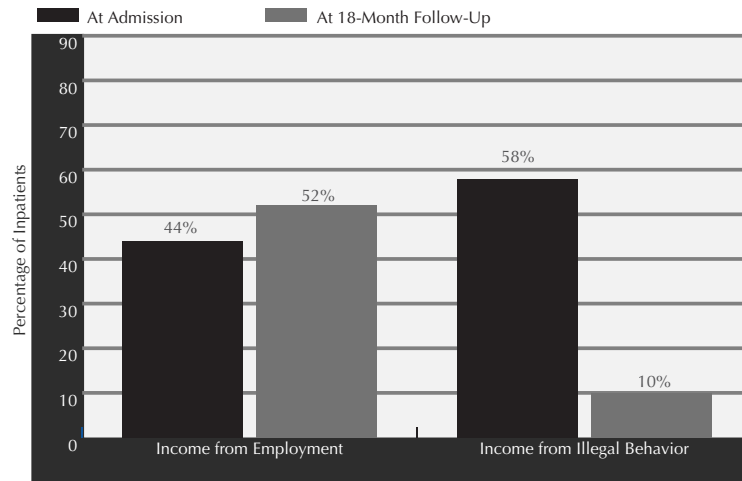
- Between 55-70% of youth admitted to residential treatment had run away from home at least once in their lives.
- Between 23-34% of youth had one or more emergency room visits in the year prior to admission.
- 90% of youth admitted to treatment began using their primary substance of abuse prior to age 16.
- Between 70-90% reported at time of admission that they currently smoke cigarettes.
- Between 23-37% of those admitted to residential treatment had been domestic violence victims.²

*Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F., *Profile of Youth Clients Admitted to Publicly Funded Substance Abuse Treatment Programs in Washington State, 1998*. Olympia, Washington: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 1999.

A Greater Number of Adolescents Reported Income Earned from Employment, and Less Income from Illegal Behavior After Treatment.

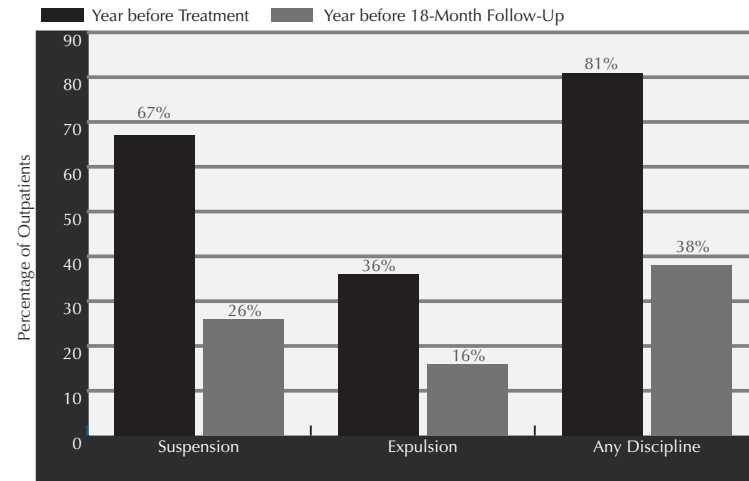
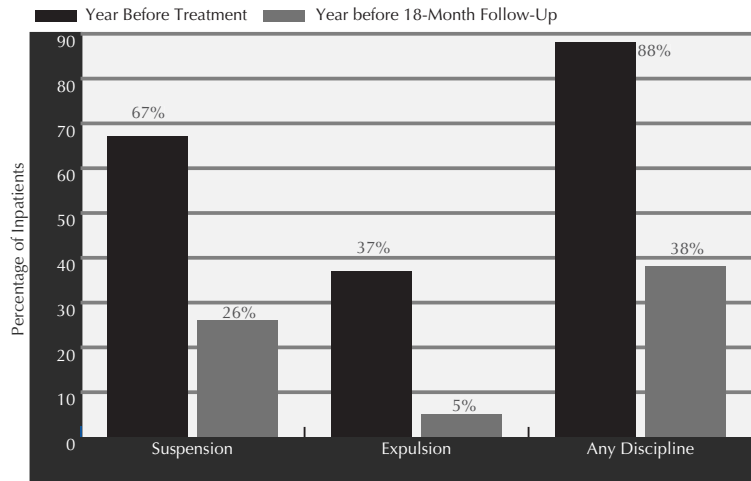


Source: New Standards, Inc. *Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report*. St. Paul, MN: New Standards, Inc., 1997.

At the time of admission, adolescent inpatients were more likely to report income from illegal behavior than from legitimate employment, while outpatients were almost equally as likely to report income from both sources. At the time of the 18-month follow-up, however, adolescents who had been in both inpatient and outpatient treatment were five times more likely to report income from employment rather than illegal behavior.



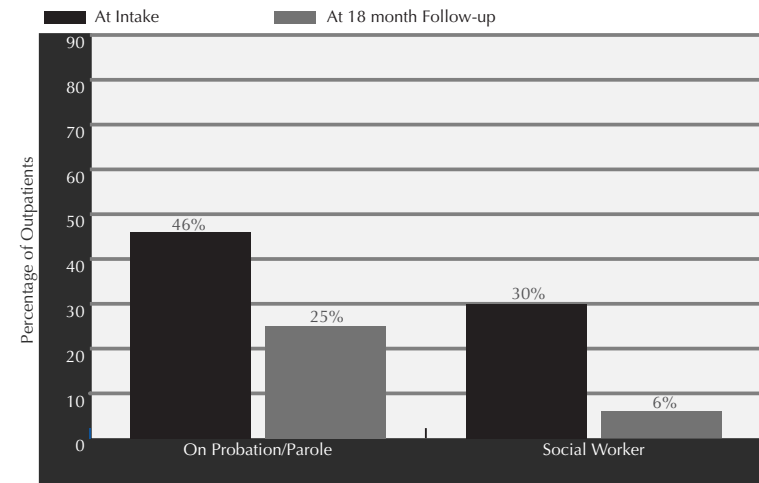
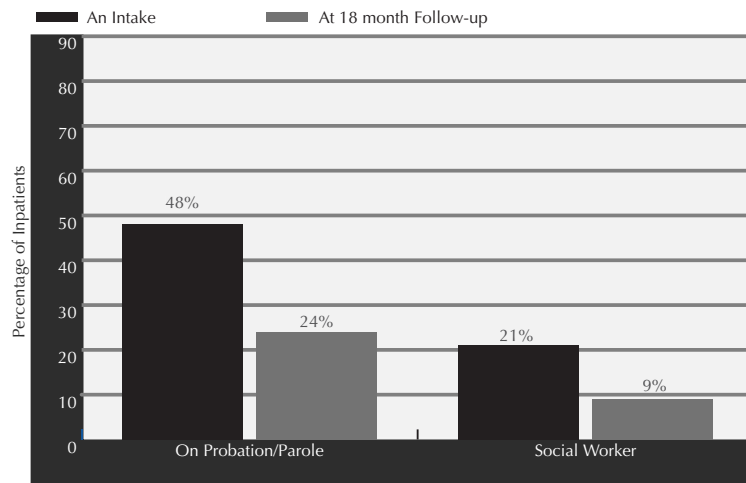
School Discipline Problems for Adolescent Patients Decreased After Treatment.



Source: New Standards, Inc. *Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report*. St. Paul, MN: New Standards, Inc., 1997.

Not surprisingly, adolescents with substance abuse problems tend to experience behavioral problems when attending school. After substance abuse treatment, however, the number of adolescents reporting any school discipline problems in the preceding year dropped by 50%. An especially encouraging outcome is the substantial reduction in school expulsions for youth receiving either inpatient or outpatient treatment. Additional study results also showed a corresponding improvement in school grades after treatment.

A Lower Percentage of Adolescent Patients were Under Legal Supervision 18 Months After Treatment.



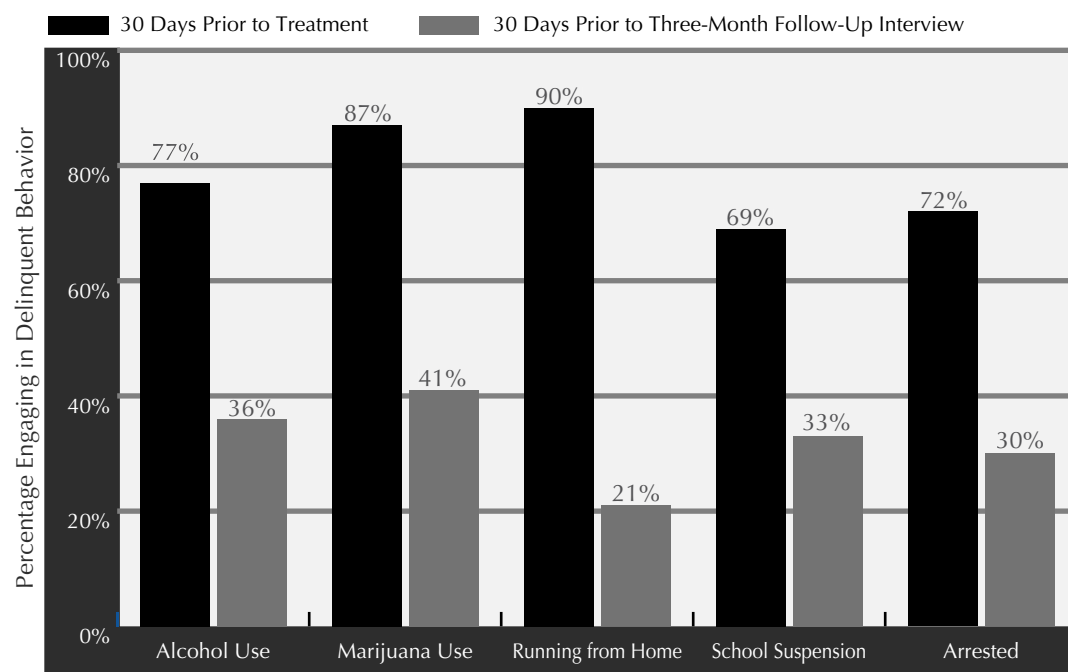
Source: New Standards, Inc. *Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report*. St. Paul, MN: New Standards, Inc., 1997.

A large proportion of children involved in the juvenile justice system have substance abuse problems and, similarly, a large portion of juveniles in chemical dependency treatment programs are involved in criminal activities. Therefore, it is expected that obtaining substance abuse treatment will have a positive effect on criminal behavior, as well as decreasing or ceasing substance use.

As expected, legal involvement by adolescents decreased considerably after treatment for both inpatients and outpatients. Compared to their status at intake, approximately half as many adolescents were on parole or probation at the time of follow-up. There was a similar reduction in supervision by social workers for inpatients, and only 6% of outpatients were under a social worker's supervision at the 18-month follow-up, compared to 30% at intake.



“Becca” Youth Who Complete Residential Chemical Dependency Treatment Are Much Less Likely to Use Alcohol or Marijuana, Less Likely to Run Away from Home, and Less Likely to Be Suspended from School or Arrested.

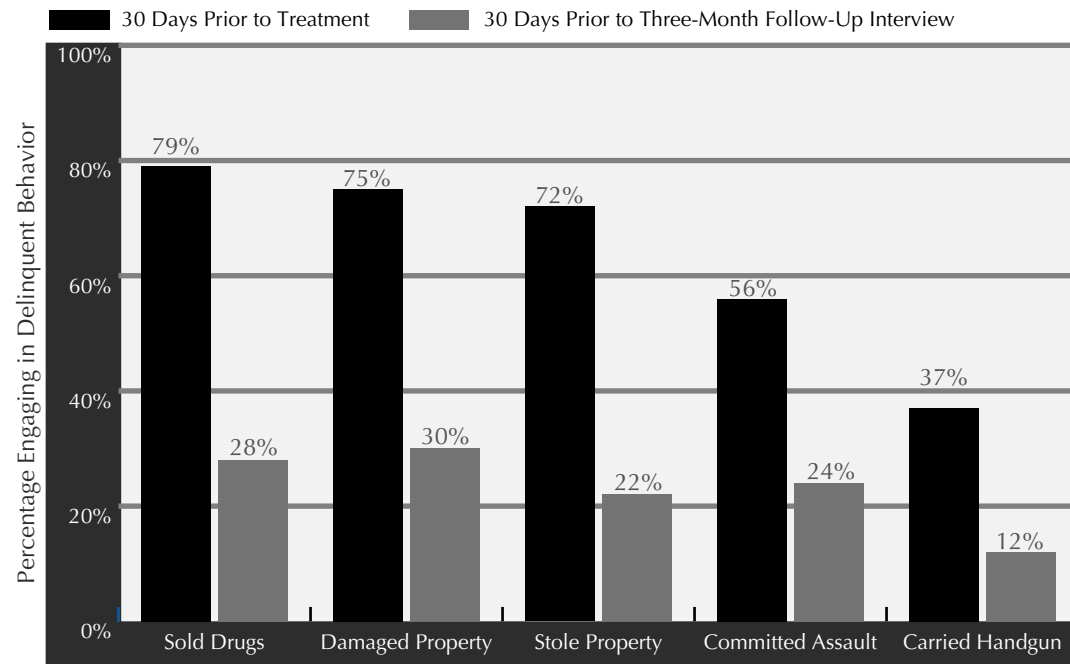


Source: Peterson, P., et al. *Treatment Outcome Evaluation: Youth Admitted to Residential Chemical Dependency Treatment Under the Provisions of the “Becca” Bill*. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 1997.

The 1995 At-Risk/Runaway Youth Act created the “Becca” program, named after a youth who was murdered after she ran away from home. Becca youth are chemically dependent adolescents who are beyond their parent’s control and/or are chronic runaways. These youth are estimated at approximately 3-4% (1,350 to 2,250) of the 45,000 youth ages 13-19 who are in need of substance abuse treatment. Most are ages 14 to 16.

While the needs of Becca Youth are very high, this graph indicates that residential chemical dependency treatment results in significant positive changes in behavior following treatment completion.

Rates of Delinquent Behavior Among “Becca” Youth Decline Substantially Following Completion of Residential Chemical Dependency Treatment.



Source: Peterson, P., et al. *Treatment Outcome Evaluation: Youth Admitted to Residential Chemical Dependency Treatment Under the Provisions of the “Becca” Bill*. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 1997.

This graph indicates that Becca youth who receive chemical dependency treatment are much less likely to engage in delinquent behavior following treatment completion. In this 1997 study conducted by the University of Washington, the percentage of Becca youth involved in selling drugs declined by 64.6%; those stealing property dropped by 60.4%; and the percentage of those who committed assault dropped by 57.1%.

The 1995 At-Risk/Runaway Youth Act created the “Becca” program, named after a youth who was murdered after she ran away from home. Becca youth are chemically dependent adolescents who are beyond their parent’s control and/or are chronic runaways. These youth are estimated at approximately 3-4% (1,350 to 2,250) of the 45,000 youth ages 13-19 who are in need of substance abuse treatment. Most are ages 14 to 16.

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Profile of Pregnant Women Served in Publicly Funded Chemical Dependency Treatment Programs in Washington State

A profile of pregnant women admitted to publicly funded chemical dependency treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	512
<i>Median Age:</i>	26
<i>Employment Status:</i>	Employed (full- or part-time) – 9%; Unemployed – 91%
<i>Primary Drug:</i>	Stimulants (including Methamphetamine) - 29%; Alcohol – 22%; Marijuana - 21%
<i>Criminal Justice Involvement:</i>	57% arrested at least once in previous year
<i>% with Children in the Home:</i>	43%
<i>Housing Status:</i>	8% homeless*

A 1999 study of pregnant, post-partum, and/or parenting women (PPWs) admitted to publicly funded chemical dependency treatment in Washington State indicated:

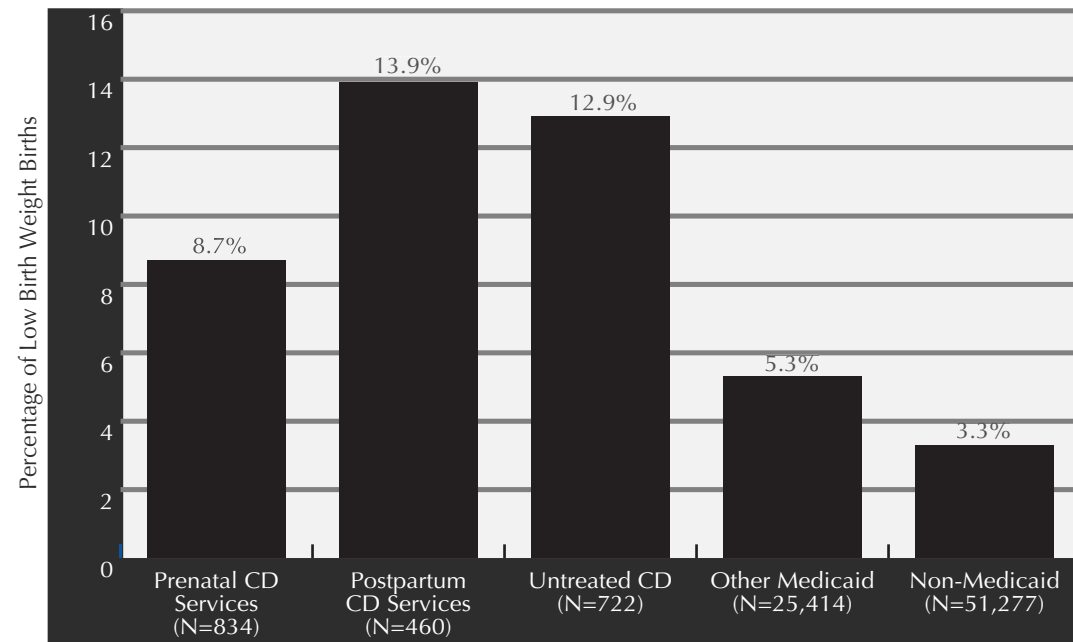
- More than 60% of PPWs admitted to treatment had been victims of domestic violence.
- Over 50% reported public assistance as their primary source of income.
- Between 38-73% had visited an emergency room one or more times in the year prior to treatment admission.
- Over one-quarter reported having received mental health treatment in the year prior to admission.
- Between 26-63% reported having used injection drugs.
- Between 77-92% reported they currently smoke cigarettes.³

* Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F., *Profile of Pregnant, Post-Partum, and/or Parenting Women (PPWs) Admitted to Publicly Funded Substance Abuse Treatment Programs in Washington State, 1998*. Olympia, Washington: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 1999.

Substance Abusing Women Who Received Chemical Dependency Treatment Prenatally were Less Likely to Have a Low Birth Weight Baby.



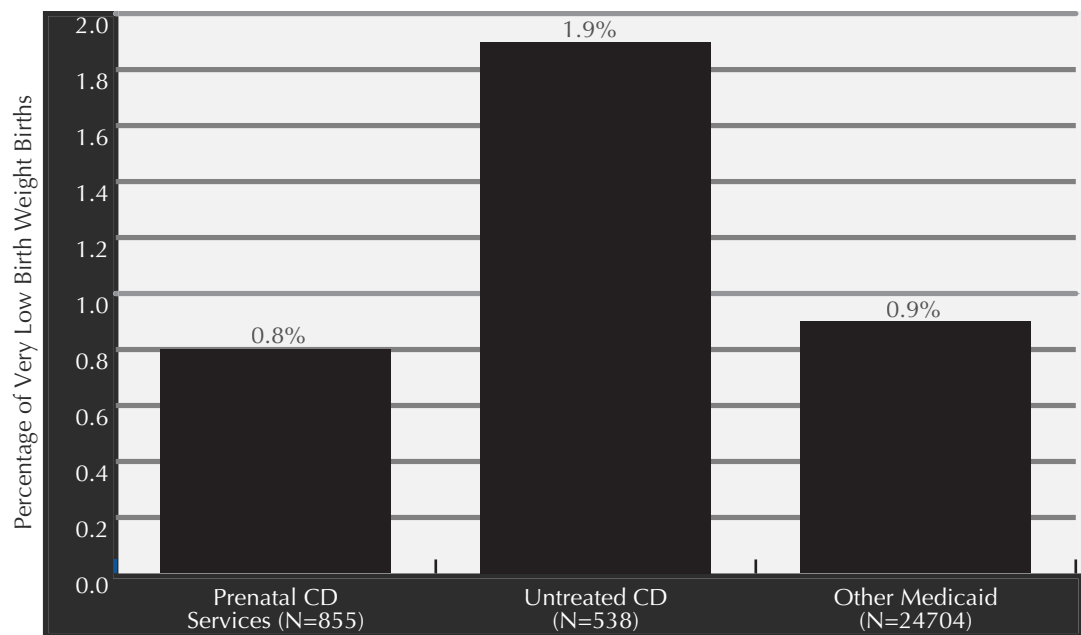
Source: Cawthon, L. "Substance Abuse in Pregnancy." *First Steps Database* 3(1). Washington State Department of Social and Health Services, 1993.

Low birth weight (LBW – newborn infants weighing less than 5.5 pounds, or 2,500 grams) is the risk factor most closely associated with neonatal death, and is associated with a wide range of disorders, including neurodevelopmental conditions, mental retardation, vision and hearing impairments, and other developmental disabilities. Alcohol and other drug abuse is linked to LBW.¹

This graph indicates that chemical dependency treatment during pregnancy is associated with lower rates of LBW among infants born to substance-abusing low income women.

¹ U.S. Department of Health and Human Services. *Healthy People 2010* (Conference Edition), 16-4, 5, 34. Washington, DC: 2000.

The Rate of Very Low Birth Weight Babies (<1,500 Grams) Born to Substance-Abusing Women Who Received Prenatal Chemical Dependency Treatment was Less than Half That of Untreated Substance-Abusing Women.



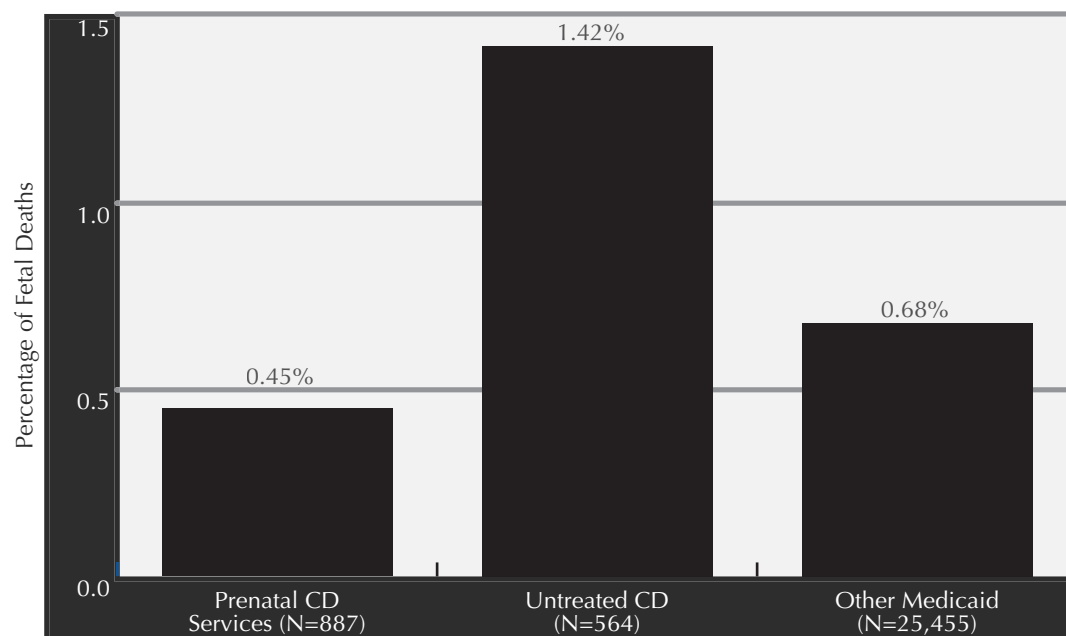
Source: Cawthon, L. "Substance Abuse in Pregnancy." *First Steps Database* 5(1). Washington State Department of Social and Health Services, 1993.

Very low birth weight (VLBW – newborn infants weighing less than 3.3 pounds or 1,500 grams) is closely associated with neonatal death, as well as a wide range of physical, mental, and developmental disorders. VLBW is usually associated with pre-term birth. Cigarette smoking and maternal use of illicit drugs is linked to VLBW.¹

This graph indicates that chemical dependency treatment during pregnancy is associated with lower rates of VLBW among infants born to substance-abusing low income women.

¹ U.S. Department of Health and Human Services. *Healthy People 2010* (Conference Edition), 16-4, 5, 34. Washington, DC: 2000.

The Fetal Death Rate for Substance-Abusing Pregnant Women Who Received Chemical Dependency Treatment was One-Third That of Untreated Substance-Abusing Pregnant Women.



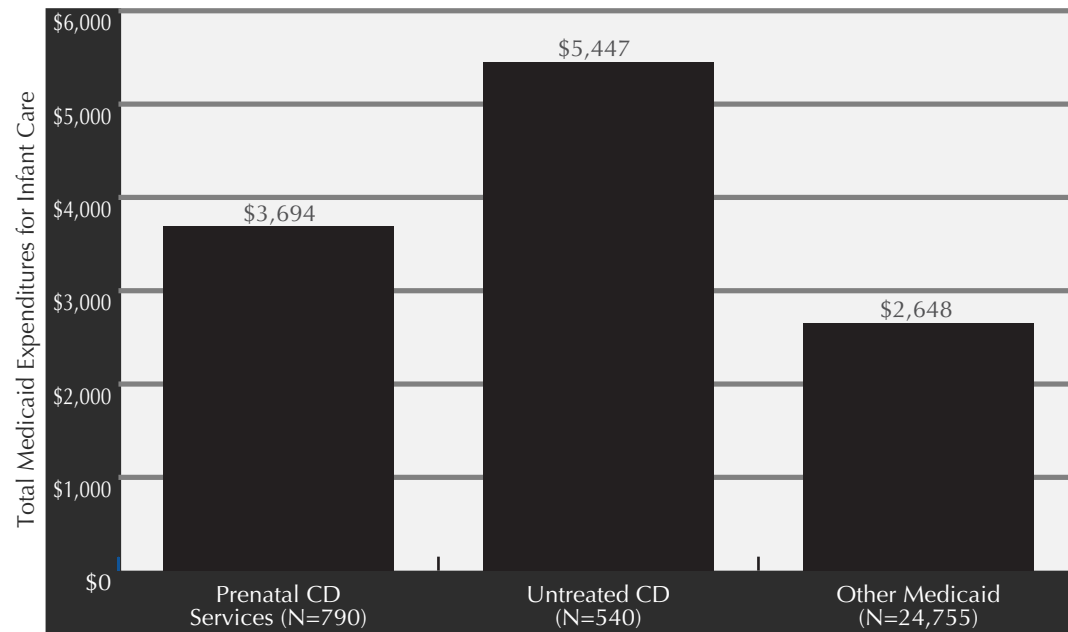
Source: Cawthon, L., & Schrager, L. "Substance Abuse Treatment and Birth Outcomes for Pregnant and Postpartum Women in Washington State." *First Steps Database* 5(1). Washington State Department of Social and Health Services, 1995.

Fetal death, or stillbirth, is associated with pregnancies complicated by maternal health conditions, including substance abuse. *Healthy People 2010* notes that, "Early, comprehensive, and risk-appropriate care to manage such conditions has contributed to reductions in fetal mortality rates."¹

This graph indicates that chemical dependency treatment during pregnancy is associated with much lower rates of fetal death among substance-abusing low-income women.

¹ U.S. Department of Health and Human Services. *Healthy People 2010* (Conference Edition), 16-4. Washington, DC: 2000.

Average Medicaid Costs During the First Two Years of Life were Lower for Infants Born to Women Who Received Chemical Dependency Treatment in the Prenatal Period than for Those Born to Substance-Abusing Women Who Did Not Receive Treatment.



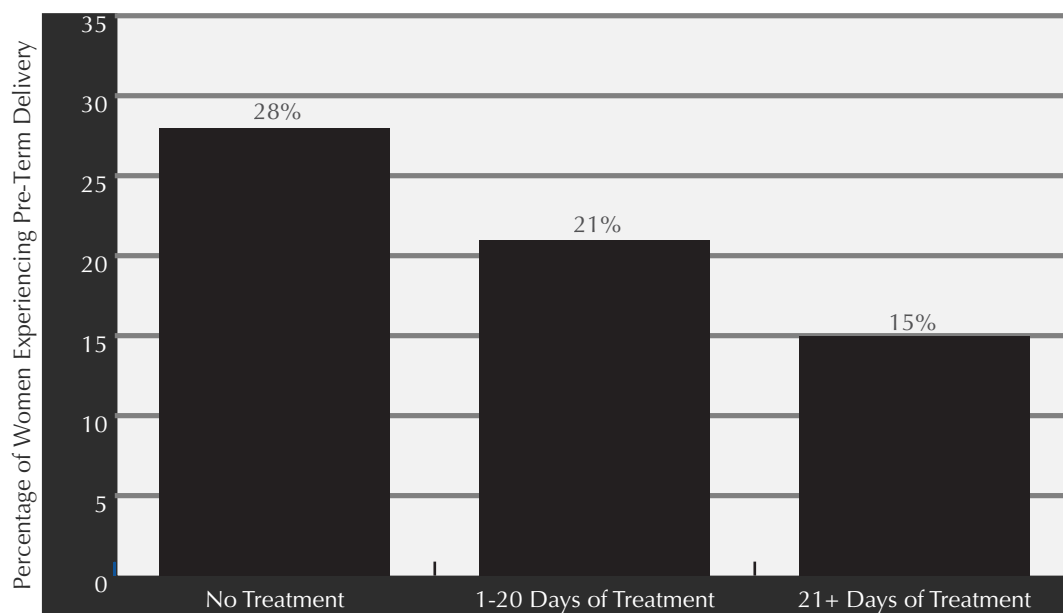
Source: Cawthon, L., & Schrager, L. "Substance Abuse Treatment and Birth Outcomes for Pregnant and Postpartum Women in Washington State." *First Steps Database* 5(1). Washington State Department of Social and Health Services, 1995.

Low birth weight (LBW – newborn infants weighing less than 5.5 pounds, or 2,500 grams) is the single most important factor in determining infant medical care expenditures during the neonatal period. Alcohol and other drug use is associated with LBW.¹

This graph indicates that average Medicaid expenditures for care during the first two years of life for infants born to untreated substance abusers was 47.5% higher than for substance-abusing women who received chemical dependency treatment during pregnancy, and more than twice that for infants born to non-substance abusing women receiving Medicaid.

¹ U.S. Department of Health and Human Services. *Healthy People 2010* (Conference Edition), 16-4, 5, 34. Washington, DC: 2000.

Pregnant, Substance-Abusing Women Who Receive 21+ Days of Chemical Dependency Treatment are Much Less Likely to Experience a Pre-Term Delivery Than Women Who Do Not Receive Treatment.



Source: Washington State Division of Alcohol and Substance Abuse. *Washington State MOMS Project: Perinatal Research and Demonstration Project – Final Report*. Olympia, WA: 1999.

A 1999 National Institute on Drug Abuse-funded study of the MOMS Project, which delivered woman-specific chemical dependency treatment services to pregnant women in Washington State in need of them, found a 46.4% reduction in pre-term deliveries for women who remained in treatment for 21 days or longer. Treatment was also associated with lower rates of fetal or infant death, lower rates of placental abruption, and improved birth outcomes.

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Profile of ADATSA Patients Receiving Publicly Funded Chemical Dependency Treatment in Washington State

A profile of patients admitted to publicly funded chemical dependency treatment under the Alcohol and Drug Addiction Treatment and Support Act (ADATSA) in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	4,036
<i>Median Age:</i>	35
<i>Gender:</i>	64% Male; 36% Female
<i>Employment Status:</i>	Employed (full- or part-time or temporary) – 3%; Unemployed – 97%
<i>Primary Drug:</i>	Alcohol – 44%; Stimulants (including Methamphetamine) – 25%; Marijuana – 11%; Cocaine/Crack – 11%
<i>Criminal Justice Involvement:</i>	64% arrested at least once in previous year
<i>% with Children in the Home:</i>	18%
<i>Housing Status:</i>	19% homeless*

Enacted in 1987, the ADATSA legislation created a program to treat adults addicted to alcohol or other drugs. To qualify, clients must be indigent, unemployable, and incapacitated due to their addiction. Patients may be admitted to either residential or outpatient modalities of treatment as individually required. The immediate goal of the program is abstinence, while ancillary goals include improved personal coping skills, as well as social and vocational skills. Success in moving toward these goals is expected to result moving toward the long-term objective of self-sufficiency.

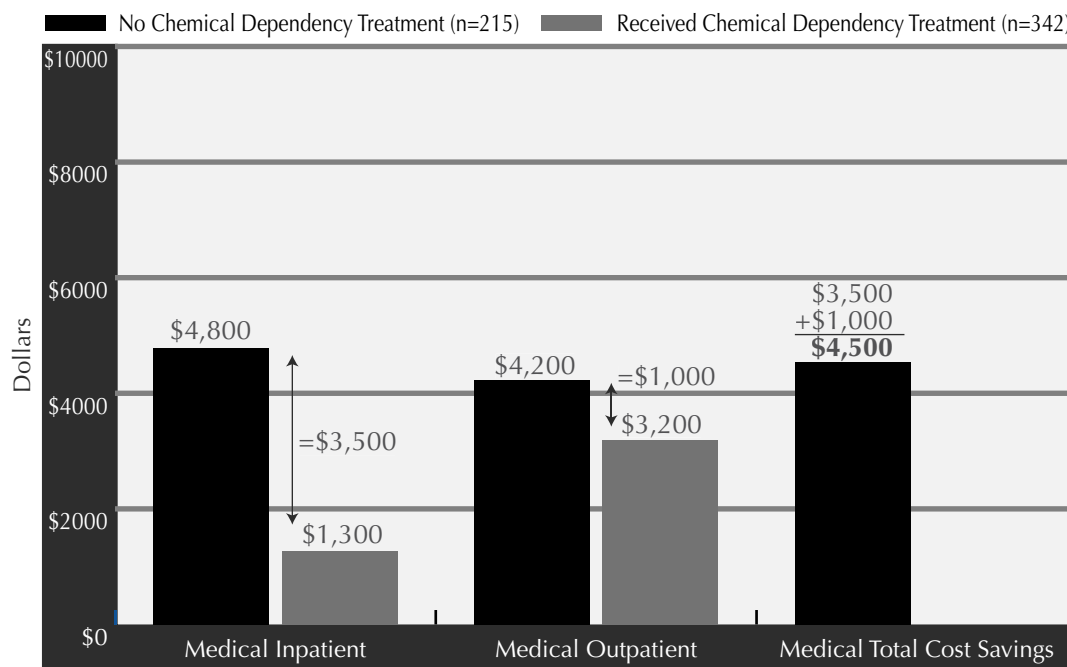
The average ADATSA patient has had a 15-year history of substance abuse, starting at age 16, with one or more prior treatment episodes. Approximately two-thirds are white, and one-third ethnic minorities. A significant proportion of patients suffer from physical, mental, or emotional problems in addition to their addiction.²

**Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.*

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Van Der Hyde, V., et al., *ADATSA Follow-Up Study of Extended Outpatient Care: A Comparison of 90 Days Versus 180 Days of Outpatient Treatment for Clients of Washington State's Alcoholism and Drug Addiction Treatment and Support Act*. Olympia, WA: Washington State Department of Social and Health Services, Office of Research and Data Analysis, 1995.

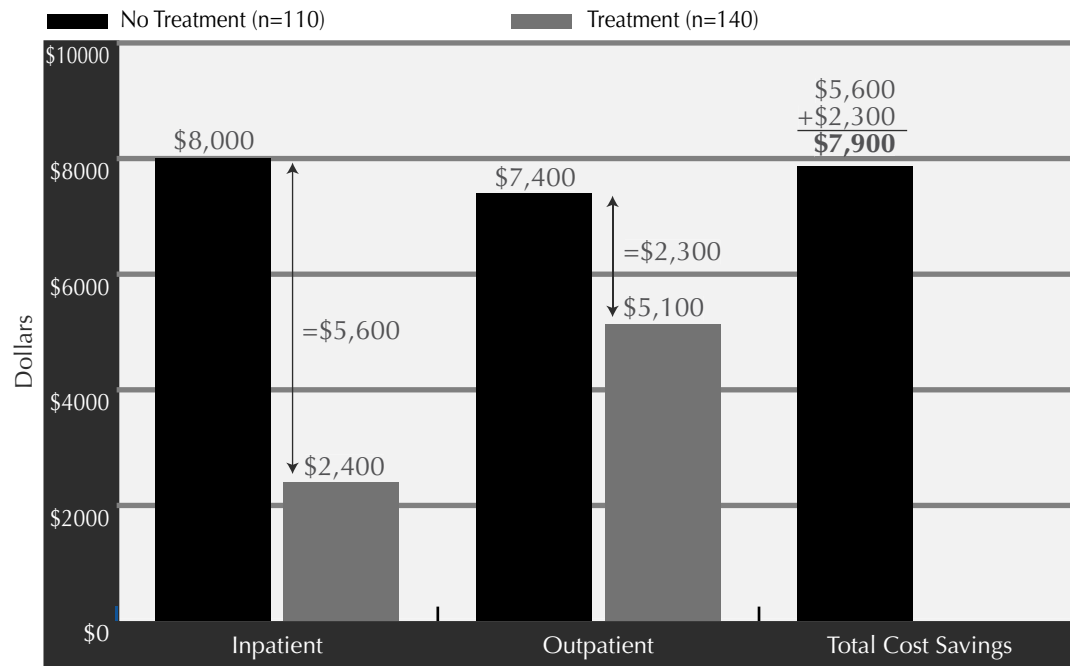
Average Medical Costs for ADATSA Patients Who Received Chemical Dependency Treatment were \$4,500 Lower than Those for Untreated Patients Over a Five-Year Follow-Up Period.



Source: Luchansky, B., & Longhi, D. *Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA)*. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This graph indicates that chemical dependency treatment can result in lower medical expenses. Over a five-year period, treated ADATSA patients had medical costs averaging \$4,500 less than those who did not receive treatment. Inpatient hospital expenses averaged \$3,500 less, while outpatient medical expenses averaged \$1,000 less.¹

For ADATSA Patients with Medicaid Medical Expenses Prior to Admission, Chemical Dependency Treatment was Associated with \$7,900 in Overall Savings in Medical Expenses Over a Five-Year Follow-Up Period.

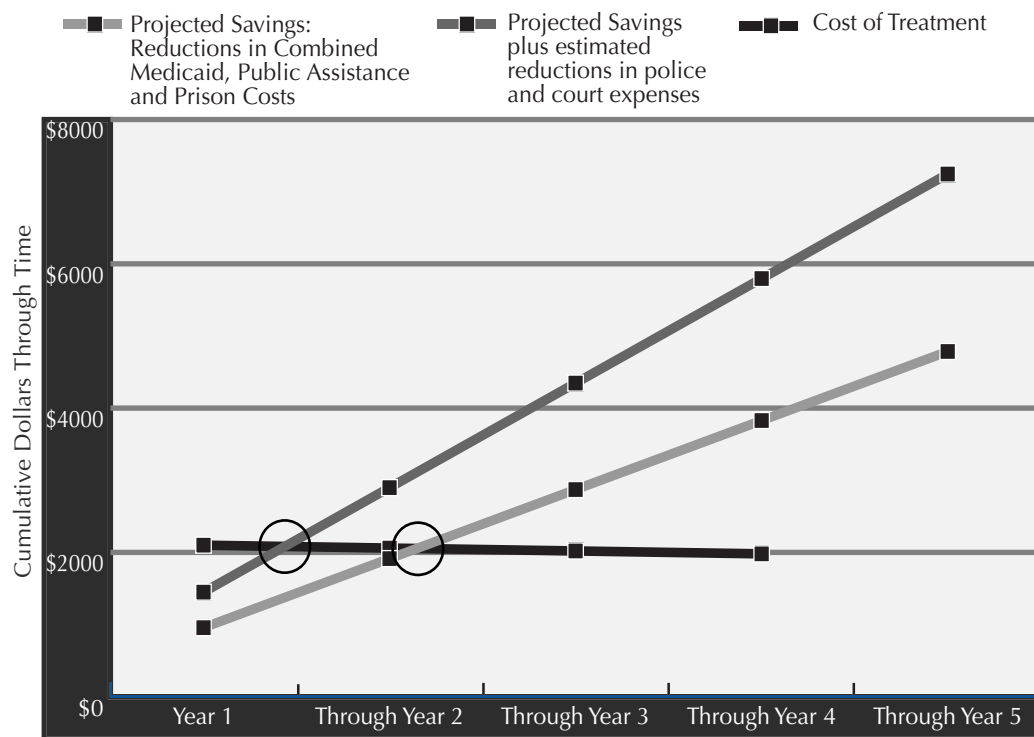


Source: Luchansky, B., & Longhi, D. *Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA)*. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This graph indicates striking savings in medical expenses for ADATSA patients, with Medicaid medical expenses prior to admission, in the five years following chemical dependency treatment. Overall savings totaled \$7,900 — \$2,300 in hospital inpatient, and \$5,600 in medical outpatient expenses.¹ Chemical dependency treatment is a wise investment, both in the health of ADATSA patients, and in reducing overall health expenses.

¹ Luchansky, B., & Longhi, D., *Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA)*. Olympia, WA: Washington State Department of Social and Health Service, Research and Data, Analysis, 1997.

Chemical Dependency Treatment Provided to ADATSA Patients Results in Reduced Costs to the Public Over a Five-Year Follow-Up Period.



Source: Luchansky, B., & Longhi, D. *Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA)*. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This five-year comparison of projected incremental savings with projected treatment costs for ADATSA (Alcoholism and Drug Addiction Treatment and Support Act) patients shows that the overall incremental savings are \$7,200, while the cumulative treatment costs total \$1,940. This means that every additional dollar spent on the treatment group results in \$3.71 in savings by the end of the five-year period. When estimated reductions in police and court expenses are added to the projections, the break-even point between costs and savings occurs much sooner. Additional funds spent on treatment pay for themselves in just over one year.

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Profile of Supplemental Security Income (SSI) Recipients Receiving Publicly Funded Chemical Dependency Treatment in Washington State

Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

A profile of SSI recipients admitted to publicly funded chemical dependency treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	1,856
<i>Median Age:</i>	41
<i>Gender:</i>	57% Male; 43% Female
<i>Employment Status:</i>	Employed (full- or part-time or temporary) – 4%; Unemployed – 96%
<i>Primary Drug:</i>	Alcohol – 43; Heroin – 20%; Marijuana – 12%
<i>Criminal Justice Involvement:</i>	34% arrested at least once in previous year
<i>% with Children in the Home:</i>	21%
<i>Housing Status:</i>	13% homeless*

* Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

Chemical Dependency Treatment Lowers Medical Costs among Supplemental Security Income (SSI) Recipients.*



The Department of Social and Health Services' Research and Data Analysis Division examined medical and chemical dependency treatment records for nearly 129,000 adult Social Security Income (SSI) recipients to determine need for and receipt of chemical dependency treatment services.¹ Some 16% were found to be in need of treatment, and, of these, 50% received treatment between July 1997 and December 2001.

Medical, mental health, and nursing home cost differences between those who received treatment and those who did not were measured. After adjusting for age, race, sex, and prior medical expenses, and also subtracting costs of chemical dependency treatment, average monthly costs were \$252 higher per month for individuals who did not receive treatment than for those who received at least some treatment. The differential was even greater for those completing chemical dependency treatment.

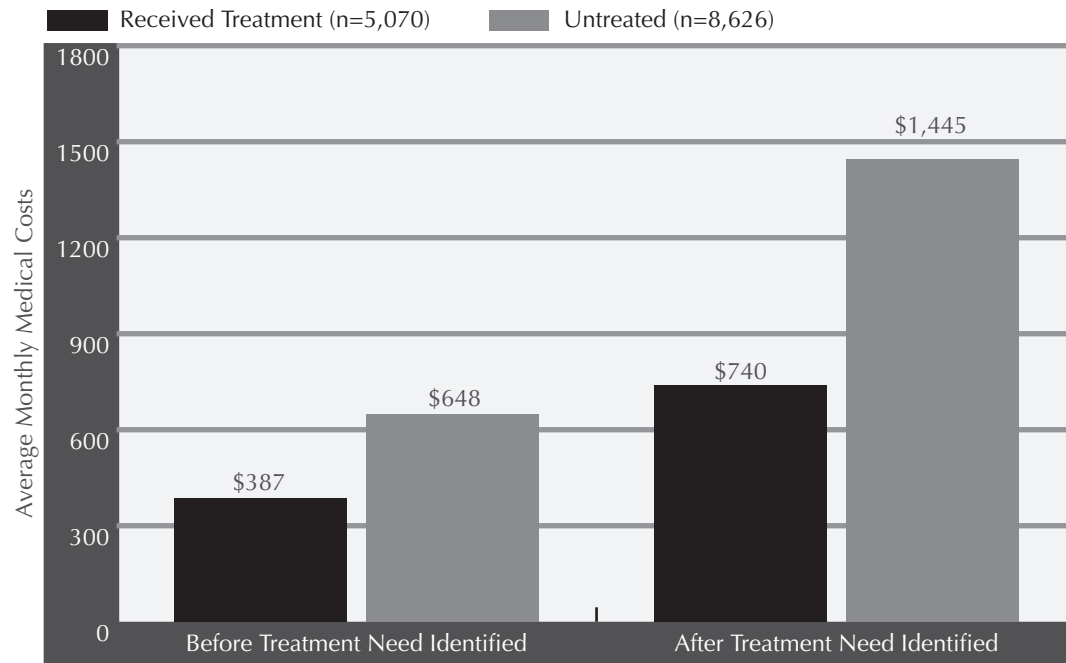
If an additional 30% of the 10,572 untreated SSI clients in need of chemical dependency treatment were to receive it, annual costs savings would amount to approximately \$9.6 million.

At least partially as a result of savings to the Medical Assistance program recognized by an earlier progress report of this study, \$2.94 million was allocated in the 2001-2003 Biennium to provide chemical dependency treatment for an average of an additional 60 clients per month.

**Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.*



Chemical Dependency Treatment is Associated with Much Lower Medical Costs Among Supplemental Security Income (SSI) Recipients.



Source: Estee, S. & Nordlund, D. (2001). *Washington State Supplemental Security Income Cost Offset Pilot Project: 2001 Progress Report*. Olympia, WA: Department of Social and Health Services, Research and Data Analysis.

Medical and chemical dependency treatment records for nearly 104,000 adult Social Security Income (SSI) recipients were examined to determine need for, and receipt of, chemical dependency treatment services. Of these recipients, 13% were in need of treatment, and 38% of those in need received treatment between July 1997 and December 2000.

Medical cost differences between those who received treatment and those who did not were measured. After adjusting for age, race, sex, and prior medical costs, the average monthly medical costs were \$540 higher for those not receiving chemical dependency treatment than for those who received at least some treatment, or a yearly cost differential of \$6,480. The Division of Alcohol and Substance Abuse has now expanded services in its SSI Cost Offset Pilot Project, and is contracting with the Department of Social and Health Services, Research and Data Analysis Division, to examine differences in mental health and criminal justice costs and in mortality resulting from chemical dependency treatment.

¹Estee, S., & Nordlund, D. (2001). *Supplemental Security Income (SSI) Cost Offset Pilot Project: 2001 Progress Report*. Olympia, WA: Department of Social and Health Services, Research and Data Analysis.

Chemical Dependency Treatment is Associated with Much Lower Medical Costs Among Supplemental Security Income (SSI) Recipients.*



The Department of Social and Health Services' Research and Data Analysis Division examined medical and chemical dependency treatment records for nearly 129,000 adult Social Security Income (SSI) recipients to determine need for, and receipt of, chemical dependency treatment services.¹ They then matched costs for those who needed chemical dependency treatment and received it between July 1997 and December 2001 with those who were in need but did not receive treatment.

For those who received any treatment:

- Medical costs were \$311 per client per month lower;
- State mental hospital expenses were \$48 per client per month lower;
- Community psychiatric hospital costs were \$16 per client per month lower;
- Community mental health services costs were \$17 per client per month higher;²
- Nursing home costs were \$56 per client per month lower.

The total reduction in costs for medical, mental health, and selected adult services for those who entered chemical dependency treatment was \$414 per client per month.

For those who completed treatment, the reduction was \$530 per client per month.

**Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.*

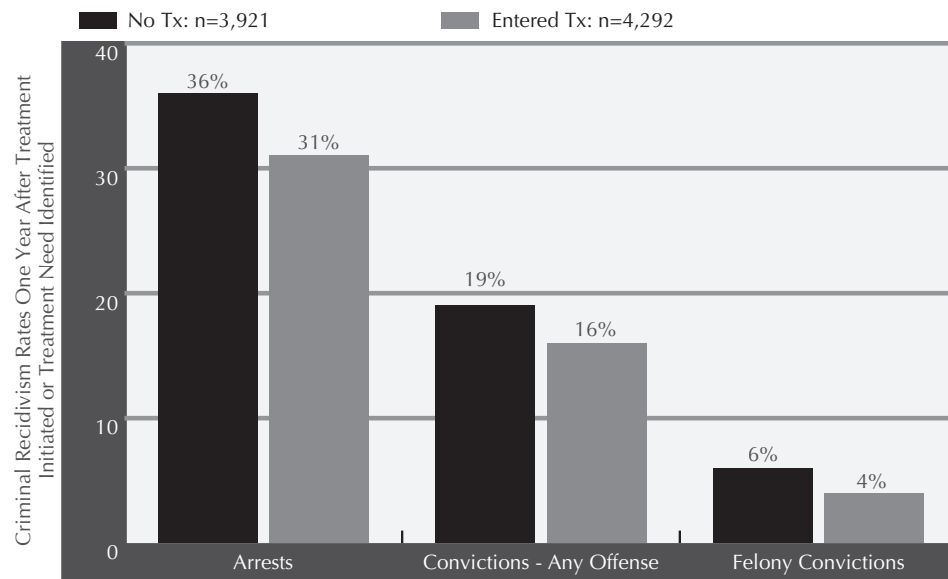
¹ Estee, S. and Nordlund, D., *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*. Olympia, WA: Department of Social and Health Services, Research and Data Analysis Division, February 2003.

² The increased community outpatient mental health service costs for those who entered chemical dependency treatment should be viewed favorably, since these services are often incorporated into successful treatment plans for those who are dealing with chemical dependency and other health related issues. Without treatment, patients may have ended up in much more restrictive (and expensive) inpatient psychiatric settings.



Chemical Dependency Treatment is Associated with Fewer Criminal Arrests and Convictions Among Supplemental Security Income (SSI) Recipients.*

Criminal Recidivism Rates One Year After Treatment Initiated or Treatment Need Identified



Source: Estee, S. and Nordlund, D., *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*. Washington Department of Social and Health Services, Research and Data Analysis Division, February 2003.

The Department of Social and Health Services' Research and Data Analysis Division examined criminal arrest and conviction and chemical dependency treatment records for nearly 129,000 adult Social Security Income (SSI) recipients.¹ Some 8,743 SSI recipients were found to have an arrest or conviction in the two years prior to initiating chemical dependency treatment or having a need for such treatment indicated. In the following year, those who entered treatment were found to be 16% less likely to have been arrested, and 34% less likely to have a felony conviction compared to those who did not enter treatment. Similarly, among clients who entered chemical dependency treatment and had a recent record of arrest or conviction, those who completed chemical dependency treatment were 43% less likely to be arrested, and 48% less likely to be convicted of a felony.²

**Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.*

¹ Estee, S. and Nordlund, D., *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*. Olympia, WA: Department of Social and Health Services, Research and Data Analysis Division, February 2003.

² Percentages are based on multivariate proportional hazards models that take account of age, gender, and race/ethnicity. See *Ibid.*, pp. 31-35 for details.

Outcomes: The Benefits of Prevention & Treatment

**TREATMENT
OUTCOMES
FOR:**

Adolescents

Pregnant Women

ADATSA Patients

Supplemental
Security Income
Recipients

Mentally Ill
Chemically
Abusing Patients

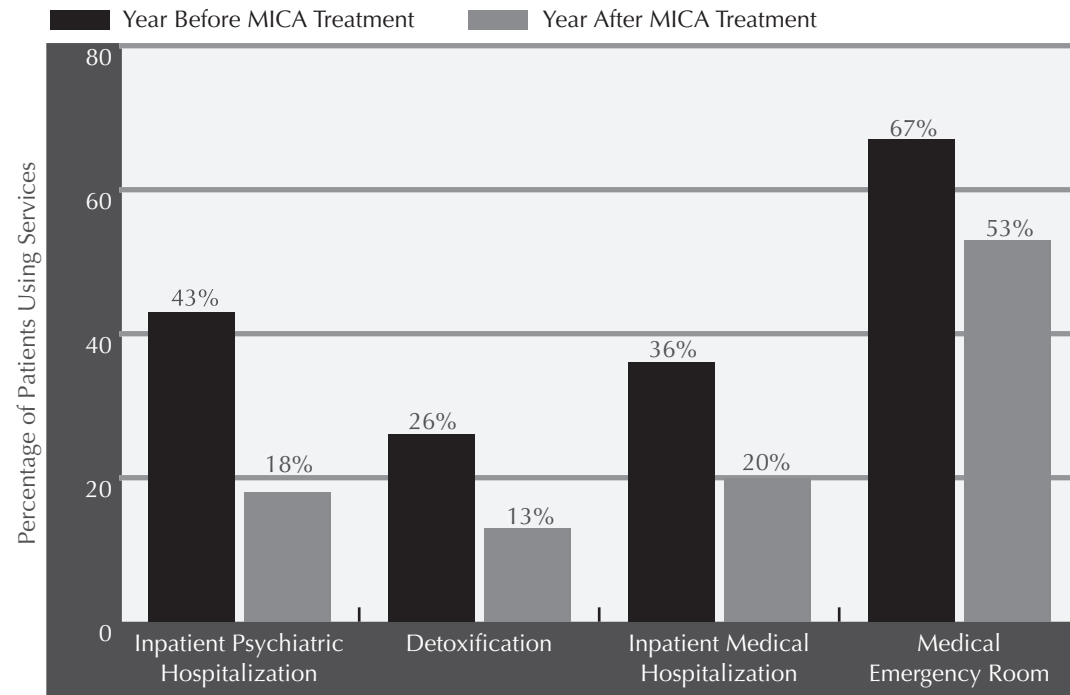
Low-Income
Patients

Patients Receiving
Opiate Substitution
Treatment

Patient
Satisfaction



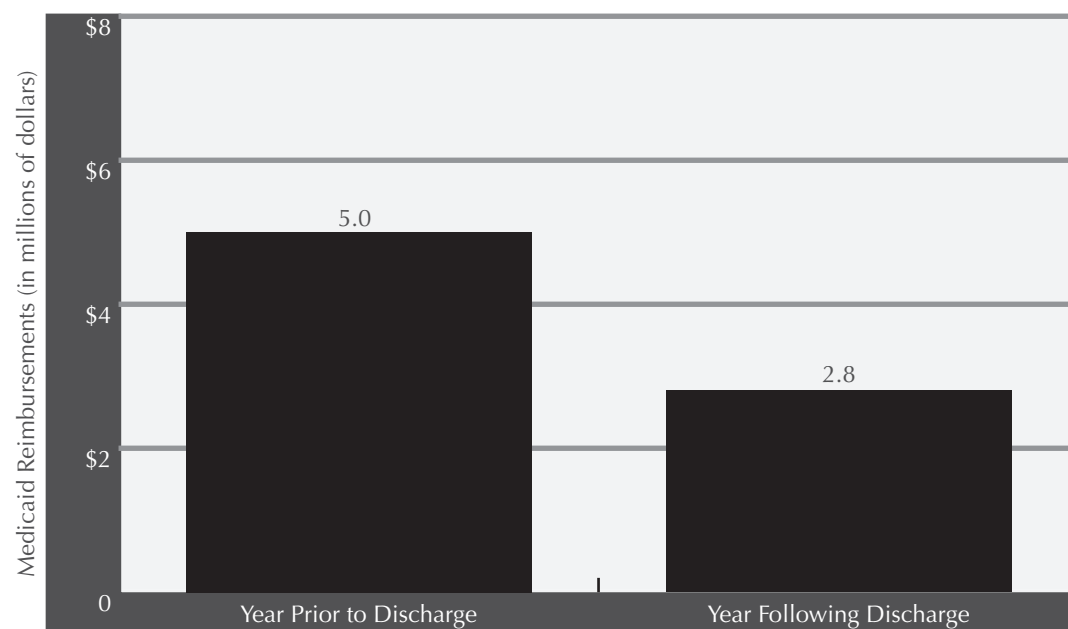
Mentally Ill Chemically Abusing Patients Utilize Fewer Medicaid Services Following Discharge from Residential Treatment.



Source: Maynard, C., et al. "Utilization of Services for Mentally Ill Chemically Abusing Patients Discharged from Residential Treatment," *The Journal of Behavioral Health Services & Research* 26(2), May 1999.

A significant number of Medicaid patients are diagnosed with both mental illness and substance abuse disorders. Treating these "co-occurring" disorders in an integrated manner has proven effective in enhancing health-related outcomes. This graph indicates that Medicaid expenses for patients with co-occurring disorders receiving coordinated services in a residential setting decreased overall by 44% in the year following discharge from the year prior to discharge.

Use of Expensive Acute Care Services Decreased for Mentally Ill Chemical Abusing Patients Following Discharge from Integrated Residential Treatment.



Source: Maynard, C., et al. "Utilization of Services for Mentally Ill Chemically Abusing Patients Discharged from Residential Treatment," *The Journal of Behavioral Health Services & Research* 26(2), May 1999.

Integrated mental illness/chemical dependency treatment has proven effective in reducing use of acute care services for mentally ill chemical abusing ("co-occurring") patients following discharge. The percentage of patients requiring inpatient psychiatric hospitalization fell by 58%; detoxification by 50%; inpatient medical hospitalization by 44%; and use of emergency rooms by 21% in the year following discharge.

Outcomes: The Benefits of Prevention & Treatment

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Patients

Patients Receiving
Opiate Substitution
Treatment

Patient
Satisfaction



Profile of Low-Income Adults Receiving Publicly Funded Chemical Dependency Treatment in Washington State

A profile of low-income admitted to publicly funded chemical dependency treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	21,163
<i>Median Age:</i>	35
<i>Gender:</i>	60% Male; 40% Female
<i>Employment Status:</i>	Employed (full- or part-time) – 19%; Unemployed – 81%
<i>Primary Drug:</i>	Alcohol – 51%; Stimulants (including Methamphetamine) - 18%; Marijuana - 13%
<i>Criminal Justice Involvement:</i>	65% arrested at least once in previous year
<i>% with Children in the Home:</i>	34%
<i>Housing Status:</i>	13% homeless*

* Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, opiate substitution, transitional housing, private-pay, and Department of Corrections patients are excluded.

Publicly Funded Residential Chemical Dependency Treatment Results in Improved Outcomes in Employment and Medical Status, Lower Substance Use and Higher Rates of Abstinence, and Reduced Criminal Activity.



A 1999 study was undertaken by the University of Washington's Alcohol and Drug Abuse Institute to assess the quality and effectiveness of the Division of Alcohol and Substance Abuse's publicly funded adult residential chemical dependency treatment system. Some 577 low-income patients were assessed at admission to treatment, and six months following their discharge. The study found:

- Patients were much less likely to use alcohol and illegal drugs following treatment. Self-reported abstinence rates for alcohol use in the past 30 days increased by 87%, and by 109% for drug use. Of those who continued to report any drug use, the percentage of patients who used any illegal drugs for seven or more of the past 30 days declined 74%, from 50% at treatment admission to 13% at follow-up.
- The average number of self-reported days of illegal activity declined 85%. Average 30-day earnings from illegal activity declined 93%, from \$485 at admission to \$32 at follow-up.
- In the 30 days prior to admission to treatment, only 19.8% of patients worked ten or more days. In the 30 days prior to the six-month post-discharge follow-up, 40.7% worked ten or more days, representing a 94% increase. Average monthly income increased from \$159 at admission to \$568 at follow-up.
- The percentage of patients reporting no days of medical problems during the past 30 days increased by 25% at the post-discharge follow-up. The number of days with mental health distress was reduced by 48%.
- The number of days with significant family conflict during the past 30 days declined by 62% at the post-discharge follow-up.¹



Profile of Adults Receiving Temporary Assistance for Needy Families Served By Publicly Funded Chemical Dependency Treatment Programs in Washington State

A profile of patients receiving Temporary Assistance for Needy Families (TANF) admitted to publicly funded chemical dependency treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	3,288
<i>Median Age:</i>	30
<i>Gender:</i>	26% Male; 74% Female
<i>Employment Status:</i>	Employed (full- or part-time) – 10%; Unemployed – 90%
<i>Primary Drug:</i>	Alcohol – 36%; Stimulants (including Methamphetamine) - 24%; Marijuana 21%
<i>Criminal Justice Involvement:</i>	54% arrested at least once in previous year
<i>% with Children in the Home:</i>	80%
<i>Housing Status:</i>	6% homeless*

A study of adults receiving TANF admitted to publicly funded chemical dependency treatment in Washington State, July 1998 – June 1999, indicated:

- One out of three women did not have a high school diploma or GED.
- Three out of four women reported they had been victims of domestic violence at some point in their lives.
- 21% reported receiving mental health treatment in the previous year.
- One out of three women reported using injection drugs at some point in the lives.²

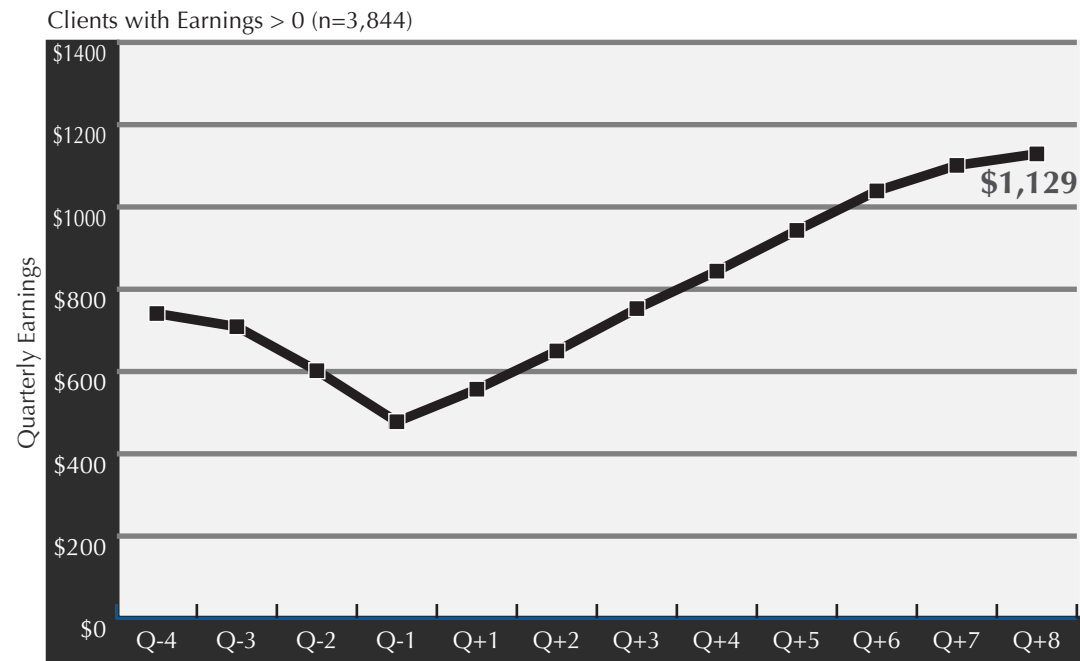
Research has shown that timely access to quality chemical dependency treatment can play a major role in moving individuals off public assistance and toward healthy lifestyles and self-sufficient lives.

* Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F. *Key Characteristics of TANF Adults Admitted to Publicly Funded Treatment in Washington State, July 1998 – June 1999*. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2000.

AFDC Clients Who are Employed Show Major Increases in Earnings Following Chemical Dependency Treatment.



Source: Wickizer, T., et al. "Employment Outcomes Among AFDC Recipients Treated for Substance Abuse in Washington State," *The Millbank Quarterly* 78(4), 2000.

This graph indicates that chemically dependent clients receiving AFDC ("Aid to Families with Dependent Children") support showed marked declines in employment income in the year prior to receiving chemical dependency treatment, and more than doubled their average employment income in the two years following treatment. AFDC in Washington State has now been replaced by TANF ("Temporary Assistance for Needy Families"). This 2000 study confirms the results of earlier studies indicating that chemical dependency treatment assists low-income patients in moving toward self-sufficiency.

Outcomes: The Benefits of Prevention & Treatment

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Mentally Ill
Chemically
Abusing Patients

Low-Income
Patients

Patients Receiving
Opiate Substitution
Treatment

Patient
Satisfaction



Profile of Patients Receiving Publicly Funded Opiate Substitution Treatment in Washington State

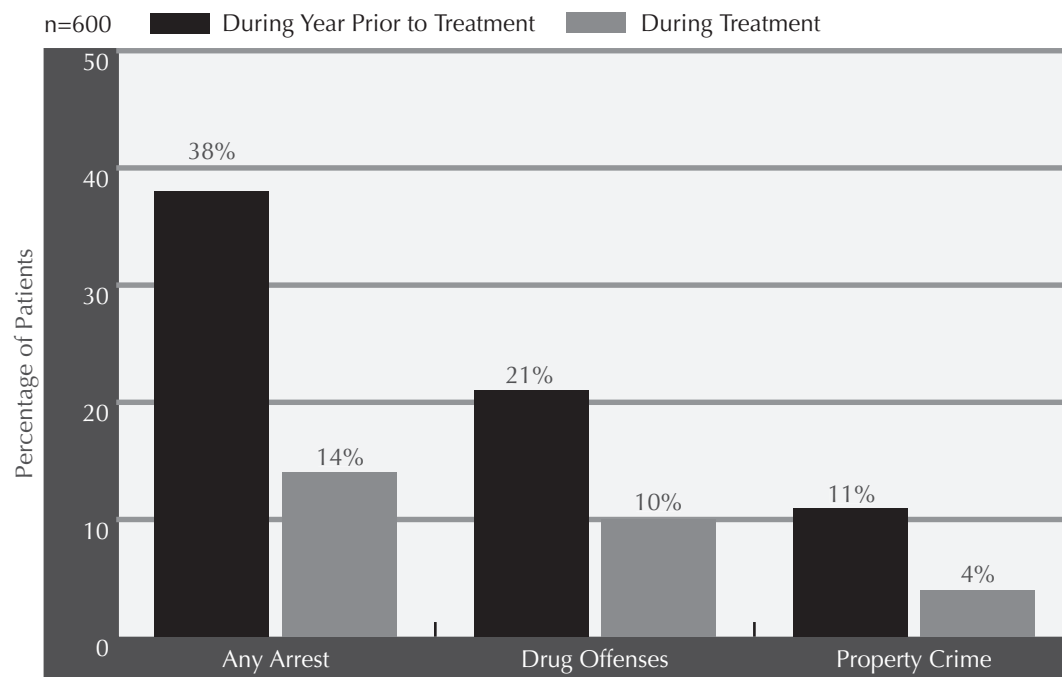
A profile of patients admitted to publicly funded opiate substitution treatment in Washington State in SFY 2002 reveals the following characteristics at time of admission:¹

<i>Number of Individuals Admitted:</i>	966
<i>Median Age:</i>	43
<i>Gender:</i>	51% Male; 49% Female
<i>Employment Status:</i>	Employed (full- or part-time or temporary) – 13%; Unemployed – 87%
<i>Primary Drug:</i>	Heroin – 97%; Other – 3%
<i>Criminal Justice Involvement:</i>	34% arrested at least once in previous year
<i>% with Children in the Home:</i>	22%
<i>Housing Status:</i>	17% homeless*

*Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, opiate substitution, transitional housing, private-pay, and Department of Corrections patients are excluded.

Criminal Arrests Among Publicly Funded Opiate Substitution Patients Decreased During Treatment When Compared to the Year Prior to Treatment.



Source: Baxter, B., and Albert, D., *Report to the Legislature: Determining the Value of Opiate Substitution Treatment*. 2002.

This graph indicates that patients receiving publicly funded opiate substitution treatment are less likely to be arrested for a crime during treatment than in the year prior to treatment.

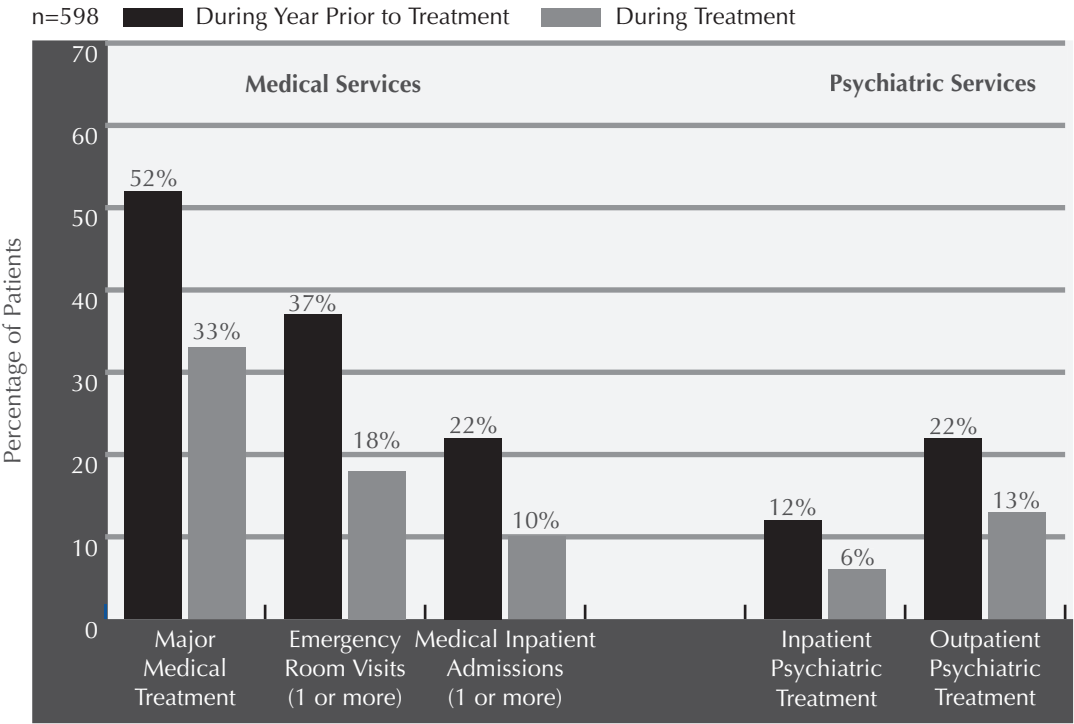
It is estimated that almost 30,000 Washington State residents have been dependent upon opiates (primarily heroin) during their lifetime.¹ Thirteen opiate substitution clinics currently provide opiate substitution treatment through administration of medication (e.g., methadone) and provision of counseling services. In addition, patients receive education, random urine drug screening to monitor drug use, and are subject to stringent rules regarding compliance. In SFY 2001, 4,766 patients were enrolled in opiate substitution treatment programs in Washington State, 2,492 (52.3%) of whom were publicly funded.²

¹ Kohlenberg, E., Yetter, R., and Mack, C., *Needs Assessment Data Project: Division of Alcohol and Substance Abuse, Fiscal Year 1990*. Olympia, WA: Department of Social and Health Services, Office of Research and Data Analysis, Planning, Research and Development, 1992.

² Data do not include patients enrolled in Veterans Administration programs.



Health Care Utilization Among Publicly Funded Opiate Substitution Patients Decreased During Treatment When Compared to the Year Prior to Treatment.



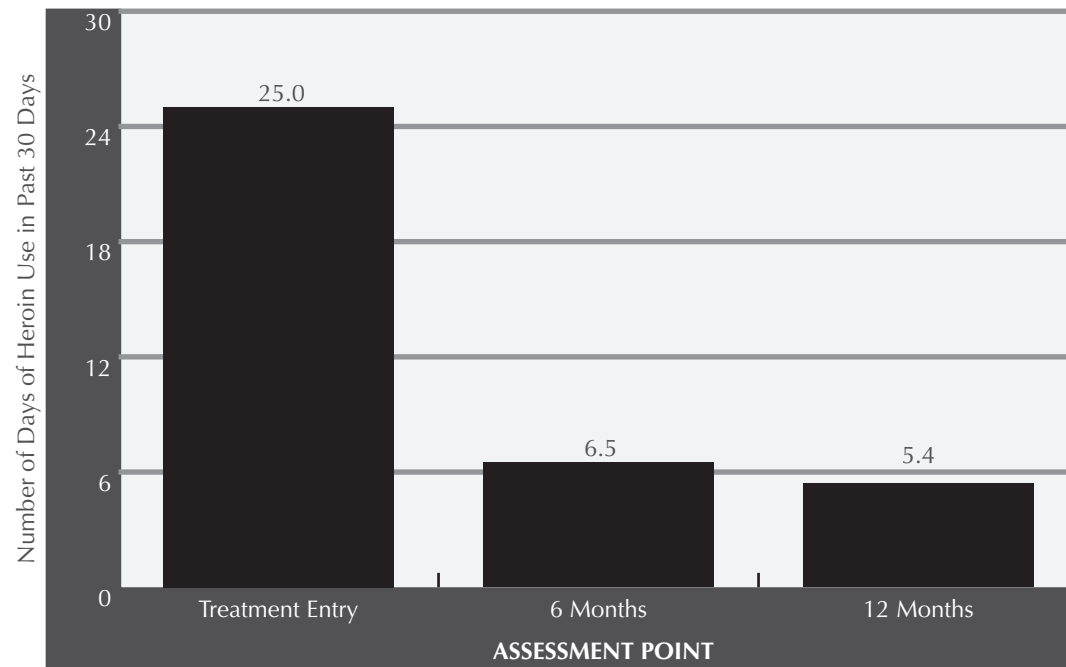
Source: Baxter, B., and Albert, D. *Report to the Legislature: Determining the Value of Opiate Substitution Treatment*. 2002.

Opiate substitution treatment has been scientifically shown to work. The federal Office of National Drug Control Policy called methadone therapy, “one of the longest-established, most thoroughly evaluated forms of drug treatment.”¹ A Consensus Panel convened by the National Institutes of Health in 1997 concluded, “Methadone treatment significantly lowers illicit opiate drug use, reduces illness and death from drug use, reduces crime, and enhances social productivity.”²

This graph indicates that patients receiving publicly funded opiate substitution treatment use fewer health care and psychiatric services during treatment than in the year prior to treatment. This results in significant cost savings throughout the health care system.

¹ Office of National Drug Control Policy, *The National Drug Control Strategy: 2000 Annual Report*. Washington, DC: Office of the White House, 2000.
² National Institutes of Health, *Effective Medical Treatment of Heroin Addiction: NIH Consensus Statement 1997*. November 17-19, 1997 15(6).

Patients Receiving Opiate Substitution Treatment Show Significant Decreases in Heroin Use.



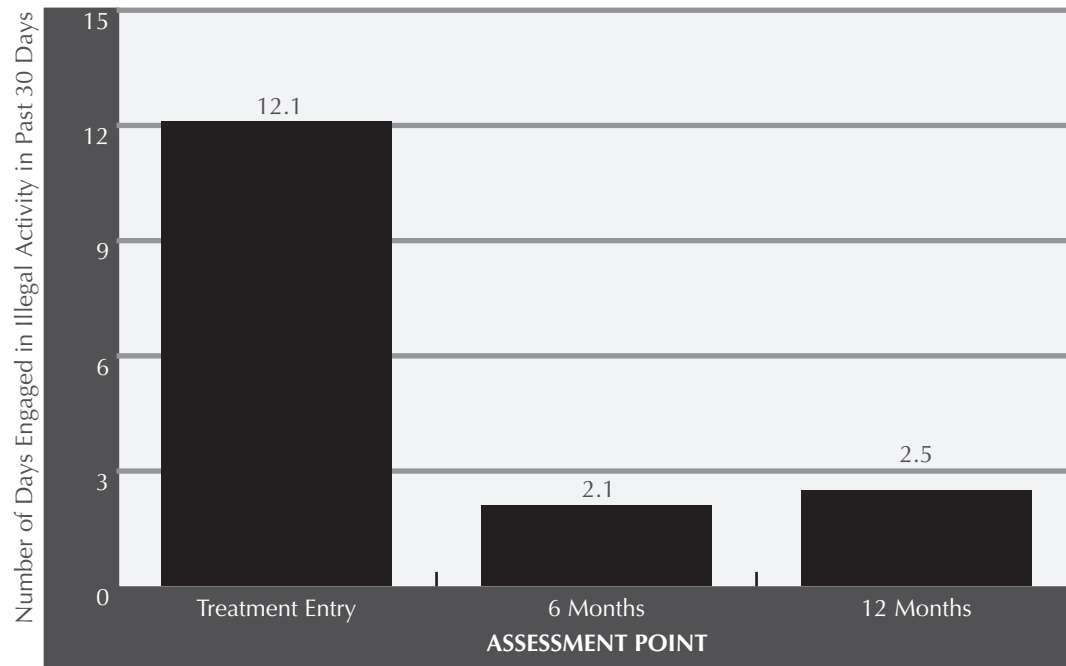
Source: Carney, M., et al., *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

A 2003 study of 135 patients admitted to publicly funded opiate substitution treatment in Washington State in 2000 demonstrated significant reductions in the average number of days they engaged in heroin use. At entry into treatment, patients reported an average of 25 days of heroin use in the past 30 days. At six months, this was reduced to 6.5 days, and at 12 months, to 5.4 days, representing a 78% decline. More than four out of five patients reported a reduction in the number of days using heroin at the six- and 12-month follow-ups.¹

¹ Carney, M., et al., *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.



Patients Receiving Opiate Substitution Treatment Show Significant Decreases in Days Engaged in Illegal Activity.



Source: Carney, M., et al., *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

A 2003 study of 135 patients admitted to publicly funded opiate substitution treatment in Washington State in 2000 demonstrated significant reductions in the average number of days they engaged in illegal activity. At entry into treatment, patients reported an average of 12.1 days of illegal activity in the past 30 days. At six months, this was reduced to 2.1 days, and at 12 months, to 2.5 days, representing a 79% decline. Some 39% of patients reported zero days using of illegal activity at the six- and 12-month follow-ups.¹

¹ Carney, M., et al., *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

Outcomes: The Benefits of Prevention & Treatment

**TREATMENT
OUTCOMES
FOR:**

Adolescents

Pregnant Women

ADATSA Patients

Supplemental
Security Income
Recipients

Mentally Ill
Chemically
Abusing Patients

Low-Income
Patients

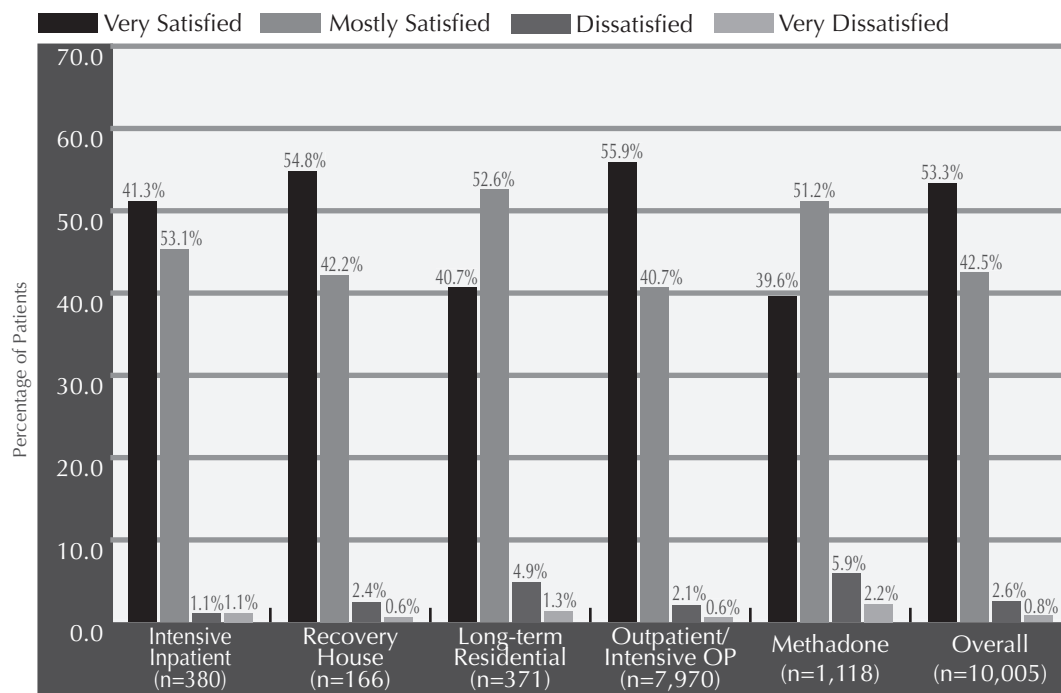
Patients Receiving
Opiate Substitution
Treatment

**Patient
Satisfaction**



In 2002, 96% of Patients Receiving Chemical Dependency Treatment Services Reported Overall Satisfaction with the Services They Received.

“In an overall, general sense, how satisfied are you with the services you have received?”



Source: Rodriguez, F., *Clients Speak Out 2002: Second Annual Statewide Client Satisfaction Survey*. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.

In March 2002, DASA conducted its second statewide client satisfaction survey. It was administered at 269 treatment centers to 12,000 patients, or 77% of those receiving treatment in the participating agencies during the week of the survey.

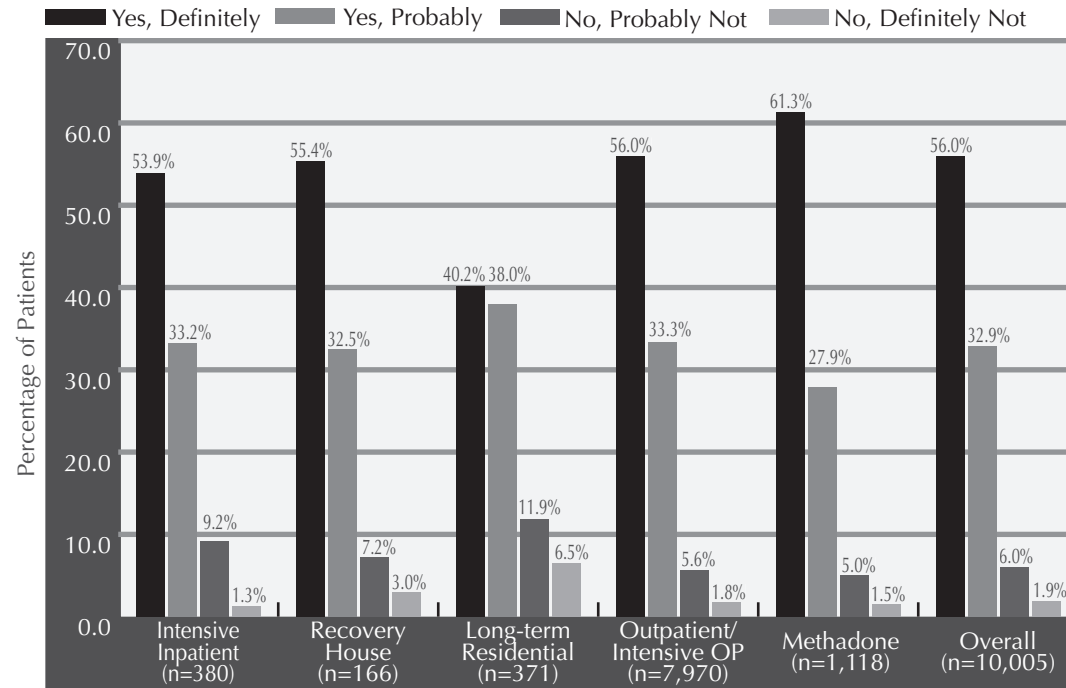
Overall, 96% of adult patients reported they were satisfied with the comfort and appearance of their treatment facility; 81% said they were always treated with respect by staff; 91% rated group sessions as helpful; and 87% reported they found individual counseling to be helpful.¹ Reports of responses to the survey were sent to each of the respective treatment agencies for use in quality improvement activities.

¹ Rodriguez, F., *Clients Speak Out 2002: Second Annual Statewide Client Satisfaction Survey*. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.

In 2002, 89% of Patients Receiving Chemical Dependency Treatment Services Reported They Would Return to the Same Program If They Needed Help Again.



“If you were to seek help again, would you come back to this program?”



Source: Rodriguez, F., *Clients Speak Out 2002: Second Annual Statewide Client Satisfaction Survey*. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.

In March 2002, DASA conducted its second statewide client satisfaction survey. It was administered at 269 treatment centers to 12,000 patients, or 77% of those receiving treatment in the participating agencies during the week of the survey.

Many patients receiving chemical dependency treatment services require other services as well. Treatment agencies play a key role in assisting patients in identifying and accessing these services. Of those reporting a need for them: 73% of adult patients said their treatment program was helpful in connecting them to legal services; 78% to medical services; 73% to family services; 71% to mental health services; 59% to educational or vocational services; and 52% to employment services.¹

¹ Rodriguez, F., *Clients Speak Out 2002: Second Annual Statewide Client Satisfaction Survey*. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.

Treatment Completion





Treatment Completion Improves Patient Outcomes

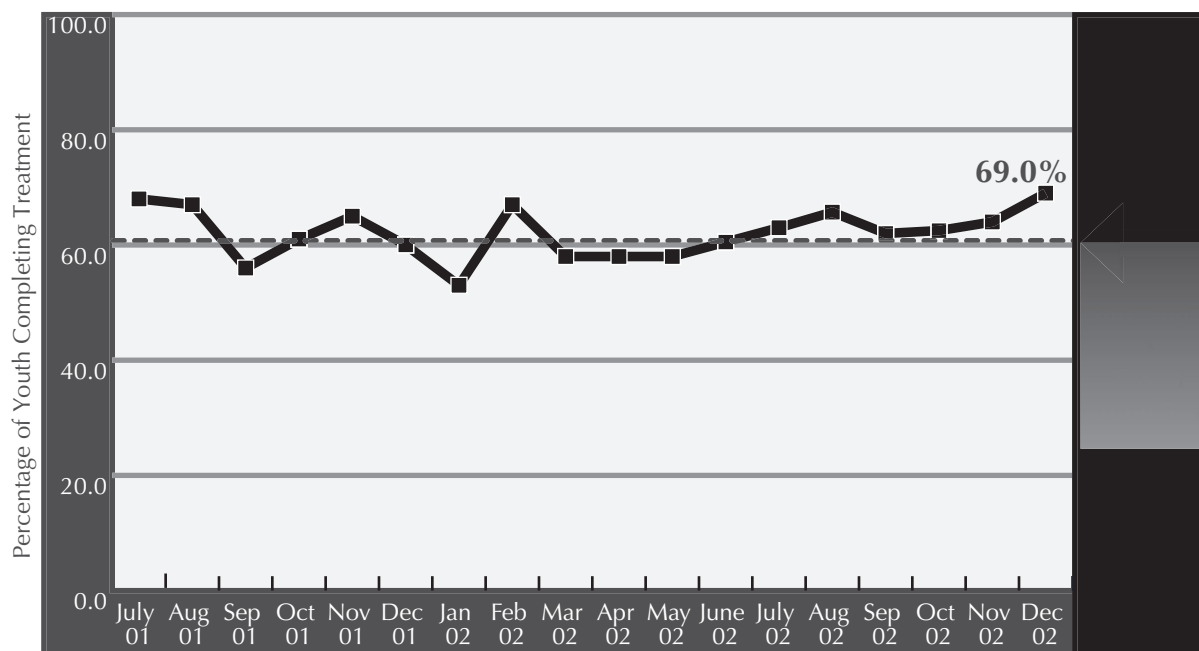
As part of the Department of Social and Health Services' pledge to ensure better outcomes for the state residents it serves, the Division of Alcohol and Substance Abuse (DASA) has committed itself to improving completion and retention rates for publicly funded patients receiving chemical dependency treatment.

Multiple studies, conducted in Washington State and elsewhere, demonstrate that outcomes following from treatment participation are significantly enhanced when patients complete treatment. For example, relative to patients who did not complete treatment, completers have been found to:

- *Have higher employment and wages following discharge from treatment;*
- *Be arrested and convicted less frequently after discharge;*
- *Have significantly fewer inpatient medical hospital admissions and are less likely to require emergency medical services after discharge;*
- *If pregnant, are more likely to have full-term deliveries, babies with higher birth weights, and fewer fetal or infant deaths; and*
- *Produce higher cost savings to public systems following discharge.*

In the pages that follow, results from studies that illustrate the above points are featured. All studies have been conducted in Washington State with publicly funded clients. Taken together, they suggest that improving treatment completion rates is one of the most powerful ways to maximize benefits from the limited public resources available to fund chemical dependency treatment. DASA is now working with researchers, counties, tribes, and both residential and outpatient treatment providers to set targets and incorporate best practices to improve completion rates throughout the state.

Residential Treatment Completion Rates for Youth Now Consistently Exceed the July 2003 Target of 60.5%.

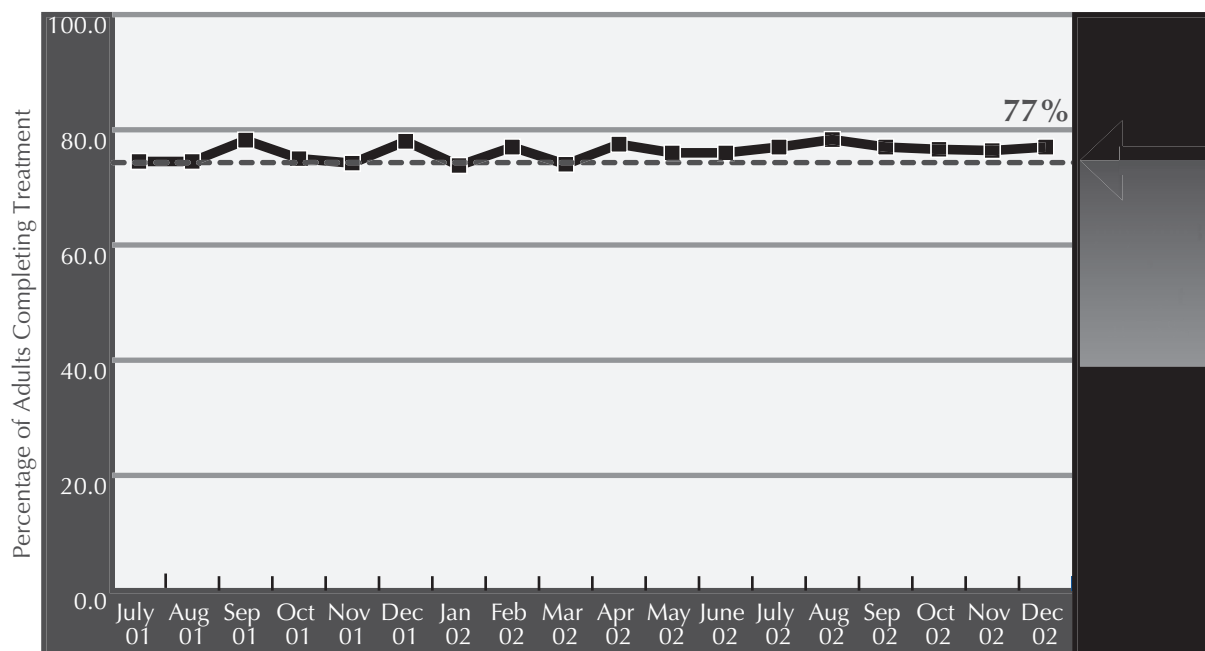


Source: Program Review, Division of Alcohol and Substance Abuse, February 2003

The Division of Alcohol and Substance Abuse has set a goal of increasing the percentage of low-income youth who complete publicly funded residential chemical dependency treatment. Research has shown that treatment completion is closely linked to better outcomes for both adults and youth. Cumulative data from July-December 2002 indicate that 65% of youth completed treatment.



Residential Treatment Completion Rates for Adults Now Consistently Exceed the July 2003 Target of 75%.



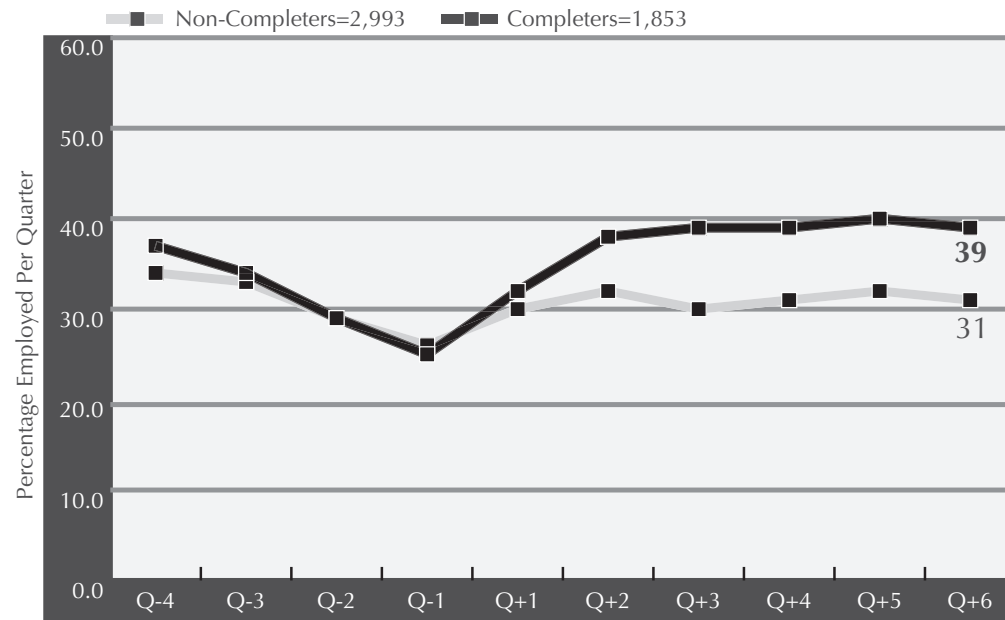
Source: Program Review, Division of Alcohol and Substance Abuse, February 2003

The Division of Alcohol and Substance Abuse has set a goal of increasing the percentage of low-income adults who complete publicly funded residential chemical dependency treatment. Research has shown that treatment completion is closely linked to better outcomes for both adults and youth. Cumulative data from July-December 2002 indicate that 76.5% of adults completed treatment.

Treatment Completers are More Likely to Become Employed After Treatment.



Percentage of ADATSA Patients Employed During the Four Quarters Before Admissions and Six Quarters After Discharge from Chemical Dependency Treatment



Source: Luchansky, B. and He, L., *Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report.* 2002.

In a recent study of ADATSA patients¹, employment trends among treatment completers and non-completers were tracked. Prior to treatment, both completers and non-completers experienced declining rates of employment (see Quarters -4 through -1 on graph above). After treatment, employment rates rose for both groups, but the rise was significantly greater for completers: during the sixth quarter after treatment began, 39% of the completers were employed compared to 31% of the non-completers, representing a difference of 25.8%.²

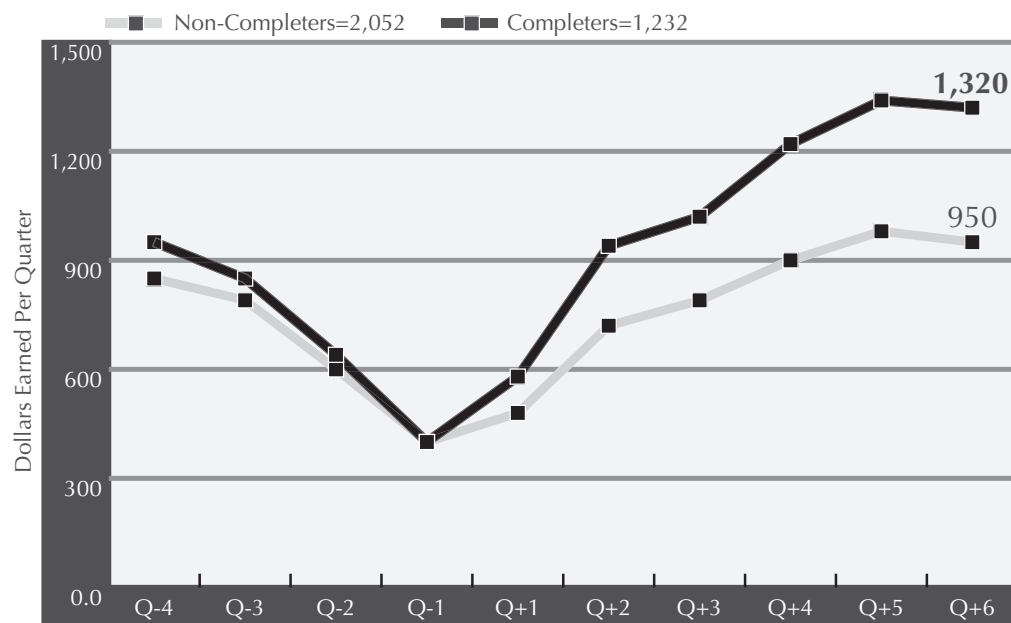
¹ ADATSA is a state-funded program that provides a continuum of care to persons who are indigent and deemed unemployable as a result of alcoholism and/or other drug addiction. ADATSA stands for the legislation that funds this program, the Alcoholism and Drug Addiction Treatment and Support Act.

² Luchansky, B. and He, L., *Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report.* Olympia, WA: Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.



Treatment Completers Show Pronounced Post-Treatment Wage Increases.

Quarterly Wages for ADATSA Patients During Four Quarters Before Admission and Six Quarters After Discharge from Chemical Dependency Treatment



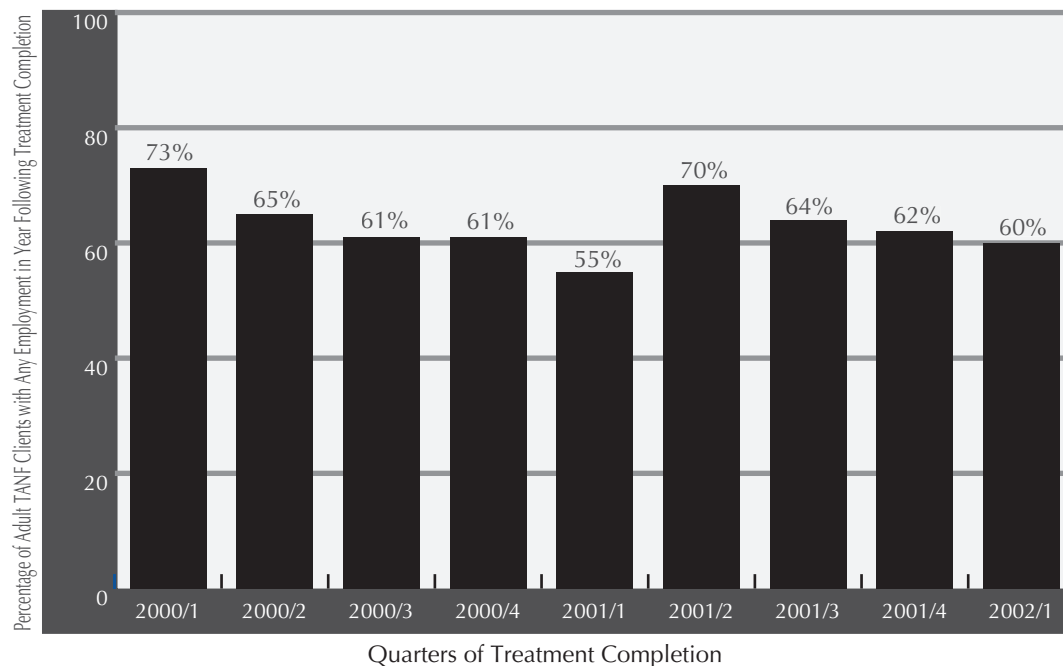
Source: Luchansky, B. and He, L., *Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report.* 2002.

In a recent study of ADATSA patients¹, among those who were employed, it was found that pre-treatment wages for those who completed and those who did not complete chemical dependency treatment was similar. For both groups, wages began to decline four quarters before beginning treatment and continued to decline until treatment began. After treatment, wages rose for both groups. However, the increase in wages for treatment completers was more pronounced than for non-completers. During the sixth quarter after treatment began (see Q+6 on chart), completers earned \$1,316 on average, while non-completers earned \$941, a difference of \$375, representing a 39.8% difference.²

¹ ADATSA is a state-funded program that provides a continuum of care to persons who are indigent and deemed unemployable as a result of alcoholism and/or other drug addiction. ADATSA stands for the legislation that funds this program, the Alcoholism and Drug Addiction Treatment and Support Act.

² Luchansky, B., and He, L., *Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report.* Olympia, WA: Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002.

Approximately Three Out of Five Adult Clients Enrolled in the Temporary Assistance for Needy Families (TANF) Program and Completing Publicly Funded Chemical Dependency Treatment Become Gainfully Employed in the Year Following Discharge.

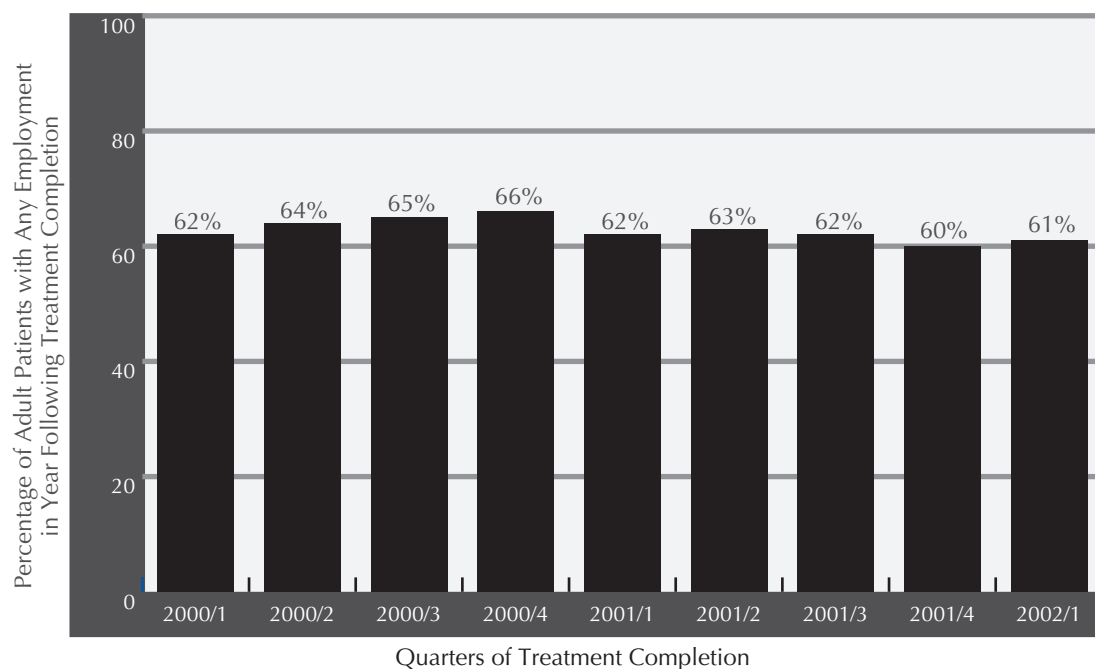


Source: Washington State Department of Social and Health Services, Research and Data Analysis Division, 2003.

This graph indicates that of clients enrolled in the Temporary Assistance for Needy Families (TANF) program who completed chemical dependency treatment in the first quarter of SFY 2002, and did not require further treatment, 60% became employed in the following 12 months. Some 41% worked more than 20 hours a week; 51% earned wages above the Federal Poverty Level. For TANF clients with substance abuse problems, chemical dependency treatment helps move them toward economic self-sufficiency.



More than 60% of Adult Patients Completing Publicly Funded Chemical Dependency Treatment Become Gainfully Employed in the Year Following Discharge.



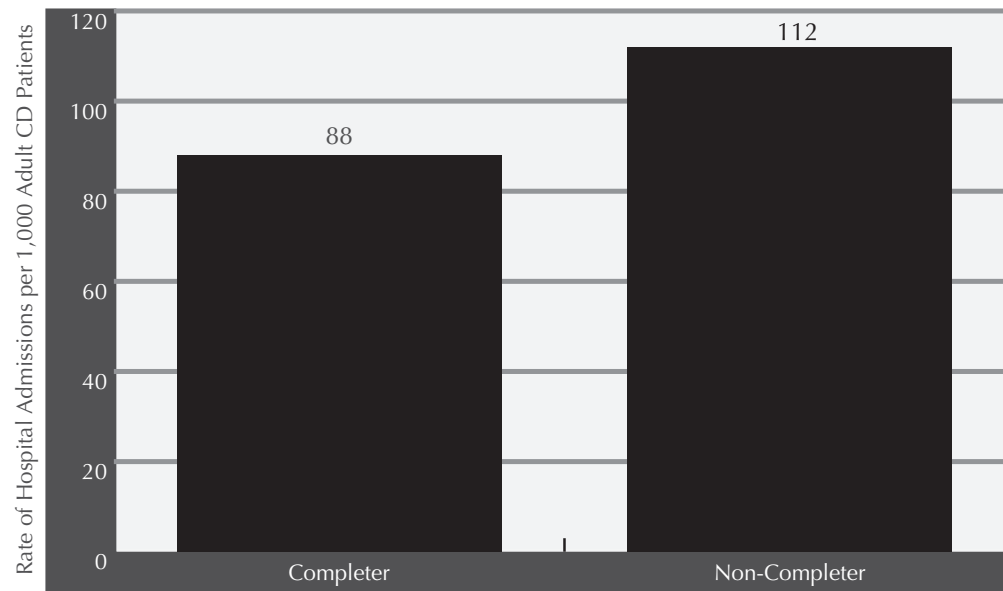
Source: Washington State Department of Social and Health Services, Research and Data Analysis Division, 2003.

This graph indicates that more than three out of five adult low-income patients who completed chemical dependency treatment in the first quarter of SFY 2002, and did not require further treatment, became employed in the following 12 months. Average monthly wages were approximately \$925. More than half (53%) worked more than 20 hours a week; 59% earned wages above the Federal Poverty Level.

Treatment Completers Had Lower Hospital Admission Rates Following Chemical Dependency Treatment.



Adjusted Rates of Hospital Admissions per 1,000 Patients in the Year Following a Treatment Episode



Source: Luchansky, B., et al. *Substance Abuse Treatment and Hospital Admissions: Analyses from Washington State, 2002.*

A study of almost 10,000 adult patients who received publicly funded chemical dependency (CD) treatment in 1995 showed that patients who completed CD treatment were 21% less likely to be admitted to a hospital in the year following discharge compared to patients who did not complete treatment.¹



Completion of Treatment and Treatment Retention are Associated with Reduced Risk of Felony Arrests Among Adults, and Convictions Among Youth.

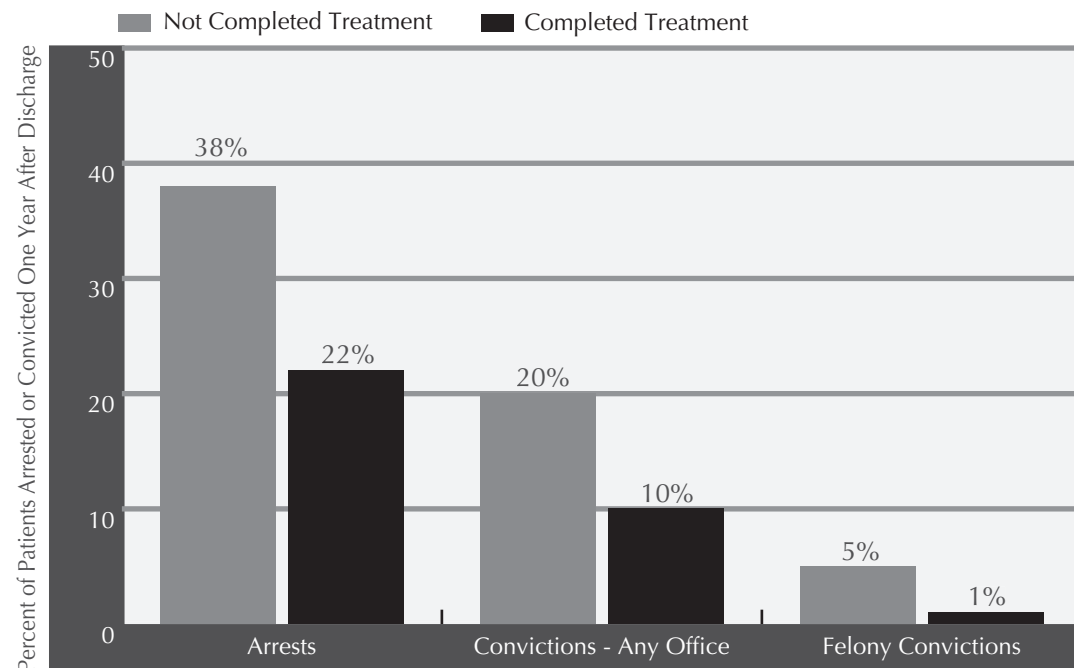
Research, both in Washington State and elsewhere, has consistently shown that admission to chemical dependency treatment is associated with lower crime rates, fewer arrests, and lower criminal justice costs. More recent studies highlight the benefits of both treatment completion and longer retention in treatment:

- A 2002 study of over 10,000 adult patients who received publicly funded chemical dependency treatment in 1995 demonstrated that the probability for a felony offense was 21% lower in the following year for patients completing treatment when compared to patients who did not complete treatment. For patients whose treatment episode was greater than 90 days, the probability of a felony arrest was 32% less than for patients with shorter treatment episodes.¹
- A 2003 study of almost 6,000 youth who participated in substance abuse treatment between 1997 and 1998 indicated that patients completing treatment had a 29% reduction in the risk of a subsequent felony conviction, and a 17% reduction in risk of any conviction in the year following discharge, compared to non-completers.²

¹ Luchansky, B., et al., *Substance Abuse Treatment and Arrests: Analyses from Washington State (Fact Sheet 4.42)*. Olympia, WA: Department of Social and Health Services, Research and Data Analysis Division, 2002.

² Luchanski, B., et al., *Treatment Readmissions and Criminal Recidivism in Youth Following Participation in Chemical Dependency Treatment*. Manuscript being prepared for publication, 2003.

Treatment Completion was Associated with Reductions in Arrests and Convictions Among Supplemental Security Insurance Recipients.*



Source: Estee, S., & Nordlund, D. *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*.

A study completed in 2003 indicates that Supplemental Security Income (SSI) recipients who completed chemical dependency treatment had lower rates of arrest, convictions for any type of offense, and felony convictions one year after discharge than those who did not complete treatment. Rates of arrest were 42% lower, rates of convictions 50% lower, and rates of felony conviction 80% lower.¹

* Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify Social Security Title II benefits. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.



Supplement Security Income Recipients Who Completed Chemical Dependency Treatment Had Lower Medical, Psychiatric, and Nursing Home-Related Costs than Those Who Did Not Complete Treatment.*

Source of Costs ¹	Treatment Completers	Treatment Non-Completers
Medical Costs	-\$380	-\$292
Mental Health Costs		
<i>State Hospital Costs</i>	-\$56	-\$46
<i>Community Psychiatric Hospital Costs</i>	-\$33	-\$11
Nursing Home Costs	-\$65	-\$53

Source: Estee, S., & Nordland, D. *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*.

In a study of over 7,000 Supplemental Security Income (SSI) recipients who entered chemical dependency treatment, those who completed treatment had lower monthly medical, psychiatric, and nursing home costs, and hence higher monthly cost offsets than those who did not. Medical care expenses for SSI recipients who completed treatment were \$380 lower than the cost of medical care for those who needed chemical dependency treatment but remained untreated. SSI recipients who did not complete treatment also had lower costs, but by only \$292, or 22.4% less.²

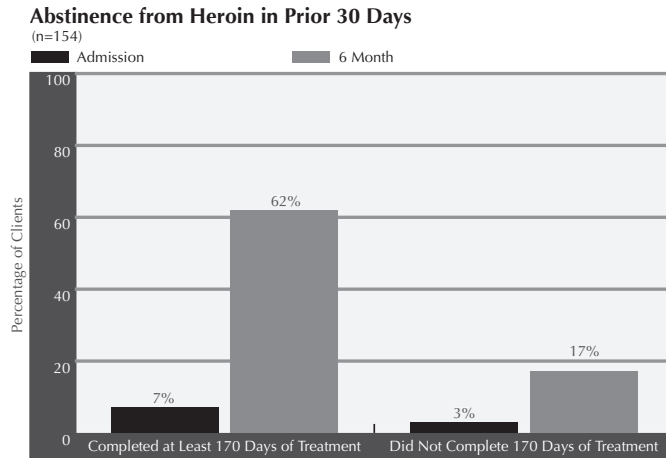
* Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for Social Security Title II benefits. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

¹ Costs represent the adjusted average monthly per person difference in costs for SSI recipients receiving chemical dependency treatment compared to costs for those who needed treatment but did not get it.

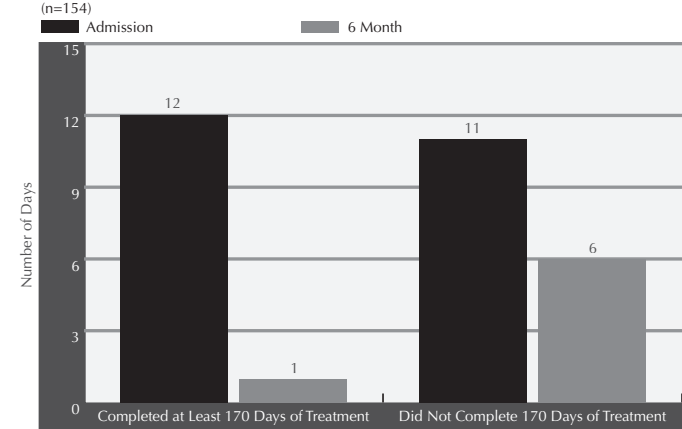
² Estee, S., & Nordlund, D. *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report*. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 2003.

Remaining in Treatment Results in Improved Outcomes Among Patients Receiving Methadone Treatment.

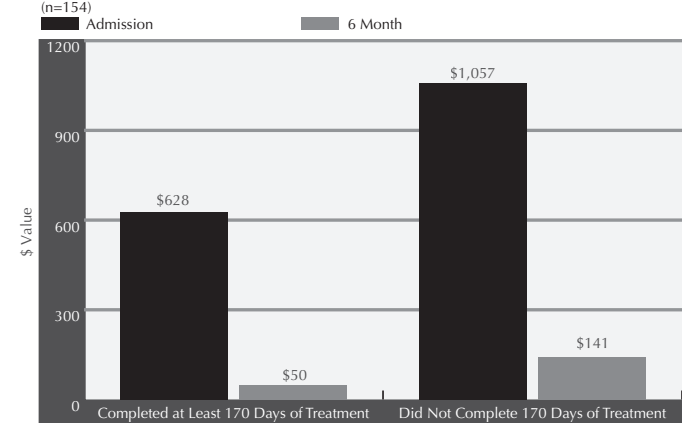
A 2001 study of 154 patients admitted to methadone treatment found that at a six-month follow-up, those who completed at least 170 days of treatment reported substantially higher rates of abstinence from heroin use, fewer days of illegal activity, and substantial decreases in money obtained through illegal activity.



of Days Engaging in Illegal Activity in Prior 30 Days
(n=154)

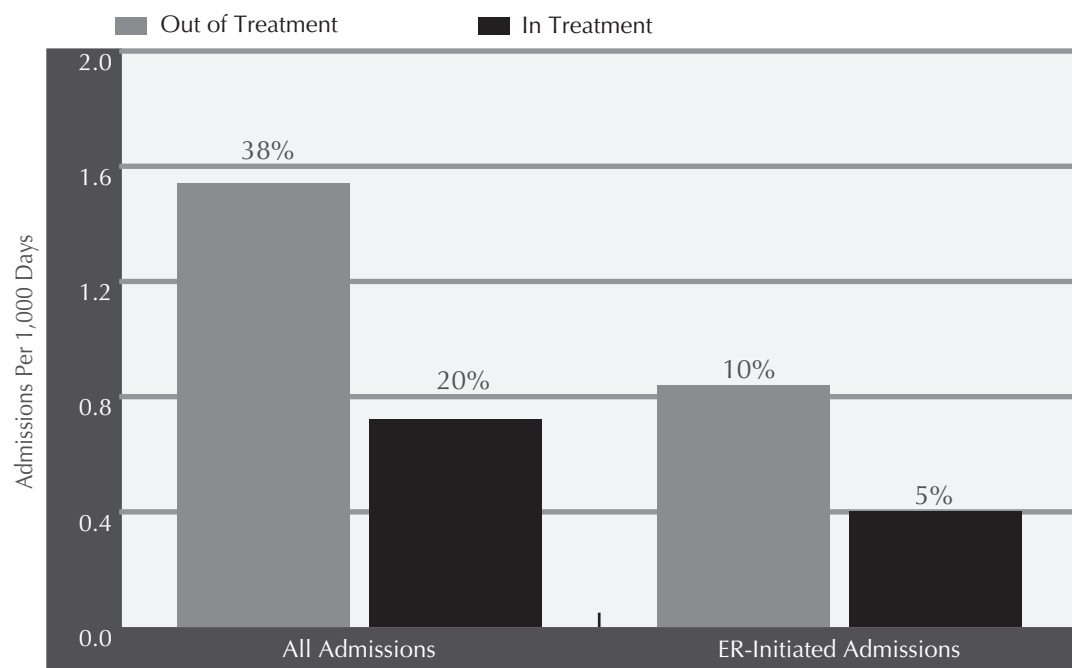


Average \$ from Illegal Sources in Prior 30 Days
(n=154)





Opiate Substitution Treatment Patients are Less Likely to Be Admitted to Hospitals While in Treatment.



Source: Luchansky, B., et al. *Substance Abuse Treatment and Inpatient Hospital Admissions for Clients in Opiate Dependency Treatment: Longitudinal Analyses from Washington State*. Manuscript being prepared for publication, 2003.

A recent study conducted for the Division of Alcohol and Substance Abuse reported that publicly funded opiate substitution treatment patients were significantly more likely to be admitted to a hospital while they were out of treatment as compared to when they were in treatment. Patients in treatment were 33% less likely to experience a hospital admission than those who left treatment. Most of the hospital admissions came through either the emergency room (56%) or through an urgent care facility (21%). Such acute care services are among the most costly. Medicaid or Medicare paid for 82% of these hospital admissions; only 15% were paid by a private payer.¹ Thus, retention in opiate substitution treatment results in better health for patients, and lower costs to the public.

¹ Luchansky, B., et al. *Substance Abuse Treatment and Inpatient Hospital Admissions for Clients in Opiate Dependency Treatment: Longitudinal Analyses from Washington State*. Manuscript being prepared for publication. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2003.

Longer Retention in Opiate Substitution Treatment is Associated with Higher Methadone Dose.



	Average Peak Methadone	Average Number of Days in Treatment
Opiate Substitution Treatment Program #1	109 mg/day	284.2
Opiate Substitution Treatment Program #2	83.1 mg/day	193.5

Source: Carney, M., et al. *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

Longer retention in opiate substitution treatment is associated with better outcomes: less crime and involvement with the criminal justice system, fewer medical hospitalizations and emergency room visits, lower medical costs, fewer psychiatric hospitalizations, and less reliance on public assistance.

A 2003 study of 135 individuals admitted to two Washington State opiate substitution treatment programs found a close association between average peak methadone dose and average number of days in treatment. Patients in the programs where average peak dose was 109 mg/day remained in treatment an average of 90.7 days longer than those in the program where average peak dose was 83.1 mg/day, a difference of 46.8%. In addition, it was found that patients whose peak methadone dose was less than 75 mg/day were significantly more likely to leave treatment prior to 170 days. The mean peak methadone dose for patients who left treatment prior to 170 days was 78.0 mg/day, compared with a peak dose of 104.6 mg/day for those who remained in treatment at least 170 days.¹

¹ Source: Carney, M., et al. *Washington State Outcomes Project: Opiate Study Sample. Final Report.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.